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No. 10

GOVERNMENT OF NORTHERN IRELAND
MINISTRY OF AGRICULTURE

MONTHLY REPORT

FEBRUARY, 1939.

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GOVERNMENT OF NORTHERN IRELAND
MINISTRY OF AGRICULTURE

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MINISTRY OF AGRICULTURE

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FEBRUARY, 1939.

Drier weather has brought about an improvement in ground conditions during the past few weeks, and a considerable amount of ploughing has been done. Heavy and retentive soils, however, are still wet and unfit for ploughing, but it is hoped that, with a continuance of favourable weather, the heavy arrears of this work will have been reduced to an appreciable extent so as to allow spring cultivations to be done at the normal time. Already grasslands are showing signs of recovery with the milder temperatures, but it is early as yet to expect any real change for the better in the supply of grass.

In this issue there is an article on "The New Agricultural Index Number," together with a number of tables showing variations in the prices of livestock and livestock products over the period 1927-38. The article explains what the new index is for, and how it has been constructed: one of the interesting features of the new index number is that it includes indices for monthly prices, and these enable readers to see at a glance how prices have changed during the past eleven years, not only from year to year, but also from month to month.

The attention of readers is also directed to the articles giving the results from the experiments with different varieties of potatoes, oats and barley, published on pages 615 to 622.

AGRICULTURAL CONDITIONS.

AGRICULTURAL CONDITIONS AT 1st FEBRUARY, 1939.

Severe wintry weather during the greater part of January continued to hold up field work, and only towards the end of the month was slight progress possible with seasonal farm operations. The New Year was ushered in with heavy rains and low temperatures, which were immediately followed by falls of snow and several heavy frosts. Alternating with further spells of frosty weather were rainy days with short bright intervals, during which temperatures were mild for the time of year. Towards the end of the third week storms of gale force were accompanied by heavy rains, but the last week of January saw a general improvement in weather conditions.

Although the frosts continued with occasional slight showers of rain and hail, the short spell of dry weather, with many bright daylight hours in this period, permitted field work, such as ploughing, the application of lime and the carting of farmyard manure to the fields, to be pushed forward with good speed in some districts where ground conditions were suitable, whilst the cutting of hedges and the clearing of drains were also undertaken. Except during these comparatively long interludes, however, outdoor seasonal farm work remained at a stand-still, and further considerable arrears accumulated.

Apart from flooding, which resulted from the heavy rains, and the material damage caused by the gales, it is feared that the most serious effects of the weather will accrue to the considerable portion of the potato crop still in the ground. The continuous rains and the more recent frosts prevented the lifting of the tubers being completed on many farms, and it was reported that considerable loss has occurred from rotting and frosting. Nevertheless, it is reckoned that there are still large stocks which have kept well in pits and stores, having been protected from the effects of the weather, and it is believed that the supplies of sound ware and seed potatoes, which are available, will be adequate to meet all normal demands for the remainder of the season.

Pastures deteriorated more rapidly in condition following the severe frosts, and are now in a rather poor state with very little "keep" available for live stock; stock owners, therefore, found it necessary to use increasing supplies of home-grown food stuffs during the month. Fodder is more plentiful than last season, although the quality is generally less satisfactory, whilst the lowness of prices for grain crops and potatoes has induced many farmers to use these in increasing quantities for feeding to stock. It is feared, however, that roots will run short on many farms in consequence of the considerable losses which occurred in crops of turnips from the severe frosts. Purchased feeding stuffs remained in plentiful supply at firm rates.

All classes of cattle have withstood the extremely inclement weather conditions well, and are in fair to average condition, whilst the general health continued satisfactory. Outlying cattle which did not receive hand-feeding on a liberal scale lost flesh, but as hand-feeding was more or less the general practice, most of the cattle may be stated to be in normal condition for the time of the year. Sheep also have come through the trying weather comparatively well. No serious outbreaks of disease have been reported, but liver fluke disease is fairly common in some areas where the exceptionally heavy rainfall over the past winter has had damaging effects on grazing land. This applies to both cattle and sheep.

Trade in live stock showed some improvement during January, but prices in all sections remained appreciably below those of a year ago.

THE CROPS.

WHEAT.—The continuance of unfavourable weather and soil conditions for such work resulted in little or no progress being made with the sowing of winter wheat, and the area sown is much smaller than last season. The bulk of last season's crop has now been threshed. Further estimates of yields continue to show the variability of this crop following the unsatisfactory weather at harvest time. Only small lots were sold during the month, and prices remained low at from 5/- to 6/- per cwt.

OATS.—Some of the crop is still in the fields, but the bulk of it has been carted in, and threshing proceeded during January when weather conditions permitted. In most districts the work is well advanced, but in a few areas a considerable portion of the crop has still to be threshed. The yields of grain were generally about average dimensions, but the quality varied considerably according to the condition in which the crop was harvested. Much of this crop is being consumed on the farms on account of the lowness of prices, and smaller quantities were marketed last month than in December. Prices at markets ranged from 5/- to 7/4d. per cwt., and averaged 5/7¾d., which is ¾d. more than the December average.

The yields of straw have been above normal, but the quality is only fair. The straw from crops grown on potato ground is generally fairly good, but that from crops grown on lea land is mainly of inferior quality. Plentiful supplies of oat straw are available for fodder, and at markets the average price improved slightly by 9d. to 42/1d. per ton.

BARLEY.—Some further threshing work was done last month, and the bulk of this crop has now been threshed. Further reports confirm the satisfactory quality of the grain. As this crop is grown principally for feeding to pigs on the farms there were relatively few sales of grain during the month.

With ploughing badly in arrears, it is yet too early to attempt to forecast the extent to which barley will be grown this year. It is probable, however, that if there is an early improvement in ground conditions many farmers will be encouraged by the subsidy for barley to sow a larger area with this crop, especially since, with pig production continuing steadily remunerative, the need for plentiful supplies of home-grown barley will continue, and also because the subsidy will be payable no matter whether the grain is sold or used on the farm.

FLAX.—Scutch mills were kept busy during the past month, and most of the crop has now been scutched. Reports on the extent of the yields and the quality of the fibre vary to a marked degree, but on the whole they are generally less satisfactory than a year ago. It is understood that, while the unfavourable weather had an adverse effect on the yield and quality of the fibre, as a general rule the effect has been less marked in the case of pure line varieties, than in that of commercial varieties.

The demand for flax fibre showed some improvement during January, and slightly larger quantities at markets were quoted at higher rates of from 8/- to 12/6d. per stone. The average price of 10/2½d. per stone in January was 9¾d. higher than for the previous month, and 2¼d. above the corresponding figure a year ago.

POTATOES.—The tubers which were adequately protected from the rains and the frosts are keeping well in pits and in stores, but further considerable loss has occurred in most districts amongst potatoes which were lifted under adverse weather conditions, and where they were in pits situated in low-lying land in which they became saturated by the further heavy rains. It is reported that blight disease, in addition to the rotting due to excessive dampness and frost, will reduce considerably the stocks of sound tubers. Furthermore, it is expected that a large proportion of the crops still in the ground in those late districts where soil conditions prevented lifting at the proper time will become a total loss. Where farmers failed to provide suitable protection from the frosts to ware and seed potatoes in stores much damage has also resulted.

Despite the fact that the weather conditions have handicapped lifting operations, and thereby have caused considerable reductions in the stocks of sound tubers, there will be ample supplies of good potatoes available for all requirements.

The firmer tone of the market in Great Britain since the New Year brought about a slight improvement in the Northern Ireland trade, and while weekly

shipments to Great Britain increased from the second week of January, in the aggregate they were below the total for the previous month, and much below those of a year ago, as the following figures show:—

Week ended	*Tons*	*Week ended*	*Tons*
28th January, 1939	2,041	29th January, 1938	6,143
21st ,, ,,	1,947	22nd ,, ,,	5,912
14th ,, ,,	1,937	15th ,, ,,	4,413
7th ,, ,,	1,126	8th ,, ,,	5,827

Grower's prices had an upward trend until the middle of the month, since when they have eased to the following levels for the week ended 4th February, 1939.

WARE.

Variety	*Bagged*	*Loose*
Up-to-Date ...	... £2 5 0 to £2 15 0	£2 0 0 to £2 10 0
Arran Banner ...	... £1 15 0 to £2 10 0	£2 5 0
Arran Victory ...	... £2 0 0 to £2 10 0	£1 15 0 to £2 5 0
Kerr's Pink ...	... £2 0 0 to £2 15 0	£2 0 0 to £2 10 0
Majestic ...	... £2 0 0 to £2 10 0	

SEED.

Up-to-Date ...	... £3 10 0 to £4 0 0	£3 10 0
Majestic ...	... £3 10 0	
Arran Banner ...	... £2 15 0 to £3 0 0	

Total supplies offered at local markets for home consumption were smaller last month than in December, and with a marked improvement in the demand at the commencement of the month, following the spell of frost and snow, prices rose sharply. Since then, however, the trend has been steadily downward, although the general levels have remained above those for December. The average price for the month, of all ware varieties at markets, was 3/6¼d. per cwt., or 10d. more than the December figure. The principal variety, Arran Victory, averaged 3/5d. per cwt. in January—a rise of 1/0½d. on the month—whilst Kerr's Pink recorded a rise of 1/2¾d. at 3/8½d. per cwt.

It was reported that the demand for seed potatoes for export has been somewhat similar to that at this time last year, and that growers have been able to cope with trade requirements adequately, notwithstanding the difficulties encountered with unfavourable weather. Healthy stocks of early varieties appear to be in keen request by farmers, and it is understood that supplies of the more popular varieties of seed are very difficult to obtain. On account of losses many growers will have to purchase the bulk of their seed for the 1939 crop.

MANGELS.—This crop is keeping satisfactorily where it had been well protected from the effects of the weather, but some injury from frost has been reported and, as a general rule, the condition of the roots is barely as good as last season.

TURNIPS.—The excessive dampness and the frosts have combined to cause serious damage to the roots both in the fields and in clamps, and it is feared that a large proportion of this crop has been totally destroyed. At present the crop is in a parlous state from rotting and frost damage, and it is feared that a general shortage for feeding to live stock will result in the near future.

HAY.—The offerings of hay at weekly markets held during January were rather variable, but in the aggregate they were similar to the previous month. The quality was generally moderate. The average price of upland hay at market centres during January exceeded the December level by 2/5d. at 61/11d. per ton, while the figure for meadow hay rose by 2/4d. to 42/11d. per ton.

Considerably reduced quantities of rye-grass seed were marketed at some centres and, with quality only moderate, prices were generally easier. Small supplies of Italian rye-grass seed were on average 4/4½d. cheaper than in the previous month at 18/6½d. per cwt., while perennial cheapened by 9¾d. to 19/4½d., and mixed seed by 3/8½d. to 11/1½d. per cwt. Small offerings of crested dogstail ranged in price from 65/- to 85/- per cwt. throughout the month.

LIVE STOCK.

CATTLE.—The health of store cattle remained satisfactory, but the condition of most is only fair. Seasonal outbreaks of hoose and liver fluke have been reported but, as a rule, they have been slight and confined to a few areas.

Supplies at fair centres remained rather small, probably on account of the frost-bound state of the roads on many fair days. Demand for good animals in forward condition for finishing was brisk at firm rates, and good types of small cattle were in local request, but thin backward stores and inferior types were difficult to cash.

The effects of the weather are, to some extent, reflected in the general condition of dairy stock, which appear to be slightly less satisfactory than usual, and in many areas the milk yields were reduced below normal seasonal levels. The general health and calving have been about normal; the number of cases of sterility and abortion appears to have been much the same as usual.

Dairy cattle continued to be offered in small to medium numbers at fair centres. Good types were in request at firm prices, but rougher animals were difficult to sell and frequently quoted cheaper.

SHEEP.—The flocks have withstood the harsh weather conditions remarkably well, and their general health and condition is normally satisfactory. Some fears, however, have been expressed that there may be trouble among

the breeding flocks later on as a result of the severe strain on ewes during the long spell of wet and cold weather. Seasonal outbreaks of disease have, however, been slight in extent. Some outbreaks of liver fluke disease and foot-rot were reported from farms in low-lying districts, but attacks were generally no more serious than in a normal season. Lambing has commenced in unfavourable conditions, but the lambs are progressing fairly well despite the wintry conditions.

Small numbers of sheep and lambs at fairs and markets were a variable trade. Demand was good and prices improved for well-finished animals, but poorer sorts were slow to sell at unaltered prices.

Pigs.—Variable supplies of young pigs were in rather slower demand, and prices as a rule tended easier. Breeding sows were in small number, and a quiet trade at generally firm rates ranging from £5 to £14 per head according to type and quality. Supplies of dead pigs were usually ample for the demand, which was rather irregular.

Weekly returns of (1) shipments of live pigs to Great Britain, and (2) purchases of dead and live pigs for curing in Northern Ireland last month are compared hereunder, with corresponding details for 1938 in brackets.

Week ended	(1) Shipments to Great Britain		(2) Bought dead and alive for curing in Northern Ireland				Total	
			Dead		Alive			
7/1/39	1,396	(4,781)	8,718	(10,399)	5,461	(373)	15,575	(15,553)
14/1/39	1,234	(2,273)	8,449	(8,556)	5,402	(2,573)	15,085	(13,402)
21/1/39	1,032	(2,928)	8,442	(8,094)	5,389	(2,618)	14,863	(13,460)
28/1/39	991	(2,440)	7,607	(7,640)	5,426	(2,902)	14,024	(12,982)
4 weeks ended 28/1/39	4,653	(12,422)	33,216	(34,689)	21,678	(8,466)	59,547	(55,577)

Horses.—There was little demand for farm horses. Incidentally it was reported that in some districts there is a growing tendency to replace farm horses by tractors. Prices for good working horses were little changed at from £25 to £45 per head. Older animals were quoted at from £10 to £30 according to quality, unbroken colts of from 2 to 3 years' old, £15 to £25, and foals from £7 10s. to £16 per head.

Milk.—The milk yield in most areas fell below the normal levels last month, and some difficulty was experienced by farmers in filling contracts. Creameries paid unchanged prices of from 4¾d. to 6d. per gallon for milk delivered, the separated milk being returned to the farmer. The rate of

equalisation payment, in accordance with the Milk and Milk Products Acts (Northern Ireland), 1934 to 1938, for milk produced in Northern Ireland and delivered to the creameries for manufacturing purposes has been determined at 0.28d. per gallon for the month of December, 1938.

It should be noted that under the regulations creameries are required to distribute the equalisation payment in accordance with the butter-fat content of the milk received from each supplier.

THE COST OF LIVING INDEX FIGURE.

The cost of maintaining unchanged the pre-war standard of living of working-class families at December 31st, was approximately 55 per cent. over the level of July, 1914, compared with 56 at December 1st, and 59 at January 1st, 1938.

At December 31st, the index of retail prices of food in Great Britain and Northern Ireland, as ascertained by the Ministry of Labour, was 38 per cent. above that of July, 1914, as against 39 per cent. at December 1st, and 45 per cent. at January 1st, 1938. The slight fall in the current index was due principally to reductions in the prices of eggs.

THE MARKETS DURING JANUARY.

There were smaller supplies of the principal vegetables marketed last month as compared with December, and average prices, except for cabbage and garden turnips, were higher than in the previous month. The average price of cabbage was unaltered at 1/3d. per dozen, while garden turnips cheapened by 3d. to 1/- per cwt. Cauliflowers improved in price by 3d. to 3/- per dozen; savoys by 1d. to 1/2d. per dozen; leeks by 1½d. to 6¾d. per bunch; parsley by 5½d. to 1/0½d. per bunch; carrots by 3½d. to 7/8½d. per cwt., and parsnips by 6½d. to 6/1d. per cwt.

In the provision markets supplies of farmers' print butter were unchanged while lump butter was slightly reduced in quantity, and average prices rose by ½d. to 1/3½d. per lb. for print, and 1/1¾d. per lb. for lump. Supplies of hen eggs were considerably increased as compared with December, while duck eggs were less plentiful. Prices, as fixed by the Ministry of Agriculture from week to week, had a slight downward trend for hen eggs from the second week of the month, but were generally above the level of prices fixed for the corresponding weeks in 1938: while those for duck eggs were little altered. Poultry supplies returned to normal, following the holiday season, and hens cheapened by 2¾d. to an average quotation of 1/10½d. each, chickens by 1½d. to 2/8¾d. each, and ducks by 4d. to 2/5¼d. each.

Small lots of unwashed wool sold at unchanged rates of 7d. per lb. for long wool and 6d. per lb. for the wool of mountain breeds.

MARKETING OF EGGS ACTS (N.I.) 1924—1937.

The following table shows the prices fixed by the Ministry, and payable by licensed wholesale dealers, for eggs purchased from producers during the weeks specified, as compared with the prices fixed for the corresponding weeks of 1938.

Week ended	1939				1938			
	Hen eggs per lb.*		Duck eggs per dozen*		Hen eggs per lb.		Duck eggs per dozen	
	s.	d.	s.	d.	s.	d.	s.	d.
January, 7th	1	0	1	6	0	10¾	1	7
,, 14th	0	11¼	1	6	0	9½	1	8
,, 21st	0	10½	1	5	0	9½	1	7
,, 28th	0	10	1	5	0	10	1	6½

*When hen eggs are delivered by the producer to the packing store of a licensed Wholesale dealer of Class A an additional ½d. per lb. is payable; in the case of duck eggs an additional ½d. is payable for each complete dozen so delivered.

Payment on a quality basis came into operation during the week ended 5th March, 1938.

The following were the standard deductions :—

Hen eggs : "Seconds" and soiled eggs ½d. per egg, rejects 1½d. per egg during the weeks ended 7th and 14th January, afterwards 1¼d. per egg.

Duck eggs : 1½d. per egg.

LONDON EGG PRICES.

Return of average prices of eggs at London, on Monday each week, furnished by the London Egg Exchange and published in the Weekly Dairy Produce Notes of the Imperial Economic Committee.

Hen Eggs, per 120.

Description	2/1/39	9/1/39	16/1/39	23/1/39	30/1/39
English, National Mark —					
(Specials)	20/6	20/6	19/6	18/–	17/6
(Standards)	17/6	18/6	18/6	17/–	16/6
(Mediums)	16/–	17/6	17/6	16/6	16/–
(Pullets)	15/–	16/–	16/–	16/–	15/6
Northern Ireland—					
(Extra Specials)	20/–	20/–	19/6	18/–	17/– 17/3
(Specials)	19/– 19/6	19/–	18/– 18/3	17/– 17/6	16/3 16/9
(Standards)	16/6 17/–	17/9 18/–	17/3 17/6	16/3 16/6	15/6 15/9
(Selected)	15/– 15/6	16/9 17/–	16/– 16/6	15/– 16/–	15/–

AGRICULTURAL PRICES

The following table shows the average prices of agricultural commodities in Northern Ireland during the three months ended 31st December, 1938, together with comparative figures for the same period in 1937, and the average prices ruling during the fourth quarter of the years 1911–13.

Commodity	Quarter ended 31st December			Percentage increase or decrease in price as compared with the corresponding period 1911-13	
	NORTHERN IRELAND		ULSTER		
	1938	1937	1911-13	4th Quarter, 1938	4th Quarter, 1937
	£ s. d.	£ s. d.	£ s. d.	%	%
Oats (White) ... per cwt.	0 5 5	0 6 11	0 6 6	−17.93	+ 6.41
Potatoes ... ... ,,	0 2 7¾	0 2 7¼	0 2 9	− 3.79	− 5.30
Hay, Clover ... ... ,,	0 2 11¾	0 3 1¾	0 3 5	−12.81	− 7.93
,, Meadow ... ... ,,	0 2 0¾	0 2 3½	0 3 3	−36.54	−29.49
Grass Seed, Italian ... ,,	1 2 0	0 7 10	0 14 11	+47.49	−47.49
,, Perennial ... ,,	0 19 7¾	0 9 4	0 11 2	+75.93	−16.42
,, Mixed ... ,,	0 12 8	0 6 8¾	0 11 5¼	+10.75	−41.17
Flax ... ... per stone	0 9 3¾	0 9 10	0 7 7¾	+21.80	+28.61
Calves (young) ... ... per head	2 5 7	2 7 8	1 14 1	+33.74	+39.85
Store Cattle, 6-12 months ... ,,	7 12 2	8 0 4	4 14 0	+61.88	+70.57
,, 1-2 years ... ,,	9 19 5	10 5 1	7 7 9	+34.97	+38.80
,, 2-3 ,, ... ,,	11 16 8	12 3 2	10 2 2	+17.07	+20.28
Fat Cattle, 2-3 ,, ... ,,	14 19 2	15 3 11	13 11 0	+10.39	+12.15
,, (Cows & Bulls) ,,	10 0 0	11 14 11	12 13 2	−21.00	− 7.21
Springers (Cows & Heifers) ... ,,	17 9 3	18 7 0	14 19 5	+16.64	+22.57
Milch Cows (down calved) ... ,,	15 14 5	16 15 3	13 15 8	+14.06	+21.61
Lambs (under 12 months) ... ,,	0 19 5	1 8 9	1 6 5	−26.50	+ 8.83
Wethers ... ... ,,	0 13 10	1 2 3	———	———	———
Breeding Ewes ... ... ,,	1 7 1	2 0 5	———	———	———
Fat Sheep, 1-2 years ... ,,	1 4 11	———	1 17 5	-33.41	———
,, over 2 years ... ,,	1 5 4	1 12 4	1 18 3	−33.77	−15.47
Sows for Breeding ... ,,	8 7 7	7 14 10	5 9 5	+53.16	+41.51
Young Pigs, 8-10 weeks ... ,,	1 12 4	1 12 7	1 6 2	+23.56	+24.52
Pork ... ... per cwt.	3 4 2	†3 5 10	2 12 10	———	———
Butter, Farmers' ... ,,	6 4 11¾	7 0 3¼	5 5 6	+18.46	+32.96
Hen Eggs ... ... per lb.	0 1 1¼	0 1 2	*0 13 11	———	———

*All-Ireland price per 120.

†Average prices calculated from purchase and grading statements, allowances being made for levy and contribution charges.

With a few exceptions, agricultural prices during the last quarter of 1938 fell further below the levels of the corresponding period of 1937, although, as will be seen from the table, the majority remained appreciably above their pre-war levels. As in the case of other grain crops, oats continued to sell at unremunerative prices, but the subsidy payable in respect of this crop may offset, to some extent, the disappointing sale returns.

Although the potato trade showed some recovery, following the arrival of colder weather in December, the absence of any appreciable demand from cross-channel centres was most noticeable in the returns of the shipping trade and the lowness of prices to growers. Here again, increased production in Great Britain is responsible for the dullness of trade, and while some further spurts in the demand may take place before the end of the season, it is unlikely that a trade revival on any appreciable scale, as for the 1937 crop, will be experienced. Hay and flax prices were slightly below the 1937 figures, but taking quality into consideration—and it was generally lower in both cases this year—it may be argued that these crops are no less satisfactory from the financial point of view. The only bright feature of crop prices is disclosed in the figures for rye-grass seed, which show marked gains over the 1937 prices.

Except for dairy cattle, the prices of livestock last quarter declined further, and all were lower on the year. While the lower prices of young store cattle during these months will be appreciated by graziers in the prospect of a general recovery in beef prices this year, those beef producers who paid dearly for their stores last spring were unfortunate in that beef prices fell in the latter half of last year. Nevertheless, some consolation was forthcoming by way of the beef subsidy and the fact that an increased proportion of home-bred cattle qualified for the maximum amount of 7/6d. per cwt. during the months under review.

Dairy cattle advanced in price from the previous quarter, but were roughly £1 per head cheaper on the year, and the drop in price in this instance also may be attributed to a large extent to the effect of the Anglo-Eire Agreement, which brought about the removal of Tariffs on animals imported from that country. Sheep prices, too, showed considerable reductions from the 1937 levels. Sows for breeding were a little dearer, whilst the quotations for young pigs showed little alteration. The steadiness of monthly pork prices, as fixed under the terms of the Act in relation to the costs of feeding stuffs and realised prices of dead meats, shown in the weighted average returns during the quarter, doubtless continued to afford farmers a degree of confidence in this trying period.

Farmers' butter and hen eggs were, on average, cheaper during the last three months of 1938 than in 1937, and it may be assumed that the effects of the mildness of temperatures on production and consumption were responsible to some degree for this trend in egg prices.

THE NEW AGRICULTURAL INDEX NUMBER.

An agricultural index number has been referred to from time to time in the Ministry's statistical and general reports, but for the last eight years no indices of agricultural prices have been regularly published. Some time ago a committee sat in London, consisting mainly of representatives of the Ministry of Agriculture and Fisheries, the Department of Agriculture for Scotland and this Ministry, to consider revising the index numbers then in use in the United Kingdom. As a result of the discussions of the committee, this Ministry, together with the other agricultural departments, has been preparing new index numbers on a basis which was agreed, with a view to publishing them each month. It is the purpose of this article to explain briefly what the new index numbers are for and how they are being calculated. Index numbers for livestock and livestock products for the period 1927-38 are published at the end of the article, and index numbers for crops will appear in the next issue of the report.

A price index number shows the price level at one period as a percentage of the price level at another, the latter being usually described as the "base period". The index enables people who are interested to see at a glance how far prices have changed from time to time, and to refer to these changes readily and simply. It is clearly very much simpler to be able to say that the egg index number stood at 82 in 1938 as compared with 79 in 1937, than to say that the price of eggs in 1938 was 11/10½d. per long hundred as compared with 10/7½d. in the previous year. Thus an index number serves the same purpose for agricultural prices as a thermometer for temperature and a clock for time.

The main features of the new index number are as follows:—

1. Each home product for which satisfactory price quotations are available will have a separate index number. In addition to indices for individual products, a single index is being prepared to show variations in the price level of all home produce sold off farms in Northern Ireland. This is called a "composite" index. Where subsidies have been paid a separate index has been prepared to show the price, plus the subsidy.

2. Commodities included in the Index.—Fifteen commodities are included in the index (see page 599), but it comprises in all twenty-three items, since products such as cattle, poultry and grass seed have been split up into their various classes. Thus there are three indices for cattle,—fat cattle, fat cows and stores; three for poultry—hens and chickens, ducks and turkeys; and four for grass seed—Perennial, Italian, mixed and all grass seed, respectively. There are three indices for milk—milk sold for manufacture, milk sold for liquid consumption, and a composite index for milk.*

* It has been found necessary to delay the publication of this index until the next issue.

The potato index on the other hand represents the price of the main crop only, as earlies form a very small proportion of the Northern Ireland crop. Similarly the egg index covers the price of hen eggs alone. The index for pigs covers only bacon pigs since the production of pigs for sale as fresh pork in this country is negligible.

3. Price Quotations upon which the Indices are Based.—A question that is often asked is—What is the connection between the prices published by the Ministry and the actual prices received by individual farmers in different parts of the country? This question will presumably be asked also about the new agricultural index number. In general, the index numbers have been calculated from the returns which the Ministry receives weekly from various market centres in Northern Ireland through the agency of their market and fair reporters. The market reporters estimate the quantities of produce, and the prices at which it is sold at nine representative markets in Northern Ireland. Reports are also received regarding the prices and quantities of live-stock sold at approximately twenty-four fairs in Northern Ireland. The straight average of the prices returned in the reports is taken to be the average price of the particular class of produce for the whole of Northern Ireland at any time. On the basis of these returns it is also the practice to calculate the average price of each product during each month and year by weighting the weekly prices according to the quantities sold at markets and fairs, as estimated by the reporters. The estimates of individual reporters may not be absolutely accurate, but it is probable that slight over-estimates at one centre may be offset by under-estimates at another, and that, therefore, the averages give a very fair picture of the movement of prices from week to week. Nevertheless where marketing schemes have provided accurate information regarding the prices at which various products are being sold throughout the whole country, for instance pigs, fat cattle and eggs, the Ministry has not hesitated to discard the market prices and to use the new prices as the basis of the index numbers. Tables published in pages 588 to 592 show the average prices on which the indices are based, and a note on the source of quotations for certain individual products is also appended to the article.

4. The Monthly Index Numbers.—Each index will show variations in price levels from month to month as well as from year to year. Month to month indices have never been published before in respect of Northern Ireland prices, and the way in which they have been constructed must be briefly explained.

In the first place, an index is being calculated for each product, and for the output as a whole, which will show the actual movement of prices from month to month. Thus the egg price index on page 586, for instance, shows a rise in price from 51 to 146 between the months of May and November, 1937. This

expresses the actual rise in average prices from 6s. 10¾d. per long hundred in May, to 19s. 8½d. per long hundred in November, each shown of course as a percentage of the average price in the above period which was 13s. 5¾d. per long hundred.

As poultry-keepers know, there is a normal seasonal increase in price between May and November of every year, and in the table referred to this seasonal fluctuation completely masks the trend of prices. Thus poultry-keepers who were interested to discover whether prices in any month were better or worse for the time of the year would not be able to find an immediate answer to this question in the first index. A second monthly index number has, therefore, been calculated for all those commodities whose prices show a marked seasonal movement, and this index attempts to show how prices would vary from month to month if there were no seasonal movement (see Table II). The method used in calculating this second index, which may be called the monthly trend index, is described in a note at the end of the article. Broadly speaking, it attempts to do what a poultry-keeper looking at the first index might try to do in his head. He might look back over a number of years, note that on the average the index is in the neighbourhood of 60 in May and 150 in November, and then he would compare prices in any month with what seems to be the typical seasonal movement. The second index will save the trouble of making such estimates as these, and will show the trend with some precision.

5. The Base Period.—In England and Wales the base period of the old index number was 1909-13. Our index number in Northern Ireland was based on the year 1923.

The Committee referred to above considered that a more recent base period than either of these was needed. Conditions of supply and the value of money have changed materially since before the war, and even since the early twenties, with the result that comparison with the old base periods may be of little interest, and even misleading. They concluded that the period 1927-29 would be the most suitable base for the new index. This was a time of comparative prosperity, and there was little fluctuation in prices and production during the three years. Thus it is an interesting point of comparison in discussions about changes in the economic position of farming in the United Kingdom.

In short, then, average prices whether for the month or the year, are shown in the new index numbers as percentages of the average price for the three years 1927-29.

6. The Composite Index and how it is constructed.—People sometimes talk about changes in the agricultural price level, and by that they mean, broadly, changes in the average prices of all commodities sold off farms. But

while it is not difficult to think of an agricultural price level in this broad sense, it is another matter to measure its changes. Clearly, it is not feasible to strike an average of 1/1½d. per dozen for eggs, and 7/6d. per cwt. of oats, for there is no common measure of quantity upon which to base such an average.

One feasible way of measuring changes in the agricultural price level, however, is to discover how far changes in the gross value of the agricultural output are due to changes in the prices of the various products which make up the output. The value of the output varies for one or both of two reasons. First because the actual amounts of different commodities sold off the farm have changed, and secondly, because prices have changed.

To take a concrete example of a farmer who has a 52 acre farm and keeps financial accounts under the Ministry's scheme; between 1933 and 1936-37, the gross income of this farmer, i.e., the value of his total sales plus the value of the farm produce which was consumed in his household, increased from £745 to £1,310. This was due first to an increase in the quantities of produce sold by him. For instance, in 1933, he had no pigs, but in 1936 he was selling 95 pigs. His sales of cattle, eggs and poultry also increased substantially. In the second place the increase in his income was due to a rising price level.

This farmer could find out how far the increase in his gross returns was due to rising prices by valuing at the prices ruling in each year the output of his farm in any given year or period of years. If he took the 1936 output for example, he would then be able to draw a conclusion on these lines. "If in 1933 I had sold precisely the same quantities of pigs, sheep, milk, eggs and poultry as I sold in 1936, my gross income would have increased by, say, 30 per cent. solely on account of rising prices". The 30 per cent. would thus measure the increase in the price level for the collection of goods sold by this farmer.

The same principle has been applied in estimating the effect of price changes on the value of the output of Northern Ireland farms as a whole. The output for any year or period of years can be calculated, and the various products which go to make up the output can be valued at the different prices of each year, and at the prices in the base period. The gross value of this constant output in each year can then be shown as a percentage of the gross value of the same output in the base period.

The only difficulty in applying this principle arises over the choice of a representative output. It is clearly of some importance how the output is composed. It must be made up of products sold off farms in as nearly as possible the same proportions as they are sold off farms in each of the years for which an index number is being calculated.

The output, as composed in 1925 would clearly not be representative since in that year pigs formed only a small proportion of the gross output, only 176,000 being sold off farms, whereas in 1936, 759,000 were sold off farms, and they formed a considerably larger proportion of the output.

To get a representative output, the Committee referred to above agreed that in constructing the composite index for any year the average output of each commodity during the five years preceding the year in question should be valued (1) at the prices of that year, and (2) at the prices of the base period. (1) would then be shown as a percentage of (2). So in constructing the composite index for 1936 for example, the outputs of pigs, cattle, sheep, oats, etc., etc., during the five years 1931-1935 are valued at the prices of 1936 and at the prices of 1927-29, and the total of (1) is shown as a percentage of the total of (2). The index for 1937 is similarly calculated, but the index is weighted in this case according to the proportions of the various products sold off farms in 1932-36, and so on.

The composite index for the years 1927-1938 (including and excluding Subsidy payments) will be published in the next issue of the report.

7. Index Number including Subsidies.—Since July, 1932, a number of subsidies have been introduced, including a subsidy on wheat, milk sold to creameries for manufacture, fat cattle and oats. Thus for each of these products two index numbers have been constructed, the first showing the actual movement in prices from year to year and month to month, and the second showing the movement in prices resulting from the inclusion of Government payments.

8. Index Numbers for Feeding Stuffs and Fertilisers.—The Ministry is preparing index numbers for feeding stuffs and fertilisers on the basis of the prices of these requisites, which are returned week by week by the market reporters. The index numbers will show changes in the prices of individual feeding stuffs and fertilisers, as well as changes in the composite price level of all feeding stuffs and fertilisers.

TABLE I.

Annual Index Numbers of Prices of Livestock and Livestock Products, 1927 to 1938. (Base 1927-29 = 100).

Commodity	1927	1928	1929	1930	1931	1932	1933	1934	1935	1936	1937	1938
Cattle: fat ...	98	103	99	101	91	87	77	77	69	75	85	83
Cattle: store ...	103	98	99	103	89	83	76	72	72	78	89	93
Cows: fat ...	106	97	97	96	83	81	68	68	61	64	71	70
Sheep: fat ...	104	104	92	91	75	59	58	60	60	60	69	60
Bacon Pigs ...	94	96	110	98	71	64	71	75	72	73	84	85
Eggs ...	98	98	104	81	71	68	67	63	68	72	79	82
Hens and chickens ...	105	100	95	89	90	79	71	64	66	69	73	72
Ducks ...	104	108	89	93	82	83	80	79	80	84	95	98
Turkeys ...	113	101	86	92	131	91	59	66	105	98	91	93
All poultry ...	102	103	95	95	103	80	67	60	70	70	71	69
Milk: for manufacture	97	103	101	80	70	67	57	51	61	69	79	82
Milk: whole ...	100	100	100	100	90	108	92	92	98	96	106	115
Milk: all ...	99	101	100	92	83	93	79	76	82	84	94	100
Farmers' Butter	97	100	103	88	71	67	58	53	62	66	73	82
Wool ...	94	107	98	50	33	20	33	39	40	58	109	51

Revised Index Numbers due to Government Payments for Milk and Cattle.

Cattle: fat ...	—	—	—	—	—	—	—	79	81	86	97	95
Milk : for manufacture	—	—	—	—	—	—	—	81	87	89	92	103
Milk: all ...	—	—	—	—	—	—	—	88	93	93	100	110

TABLE II.

Monthly Index Numbers of Prices of Livestock and Livestock Products, 1927 to 1938, Corrected for Seasonal Variation. (Base 1927-29 = 100).

Fat Cattle.

Month	1927	1928	1929	1930	1931	1932	1933	1934	1935	1936	1937	1938
January ...	99	98	97	102	92	87	83	82	70	71	72	88
February ...	101	103	96	103	89	88	85	79	67	72	73	87
March ...	101	106	98	105	88	92	81	76	66	71	78	86
April ...	101	110	104	103	89	92	76	71	67	72	89	85
May ...	99	114	101	95	92	92	76	72	69	72	91	83
June ...	99	113	99	97	95	84	73	73	70	75	89	84
July ...	101	106	95	99	92	89	72	75	72	78	89	82
August ...	103	99	97	100	90	88	72	80	69	79	93	81
September ...	103	97	97	101	89	83	72	80	72	77	90	79
October ...	97	96	99	102	91	77	76	79	72	78	91	80
November ...	93	101	99	101	89	78	77	76	73	77	92	78
December ...	88	102	103	96	91	82	76	74	73	76	95	75

Fat Cattle.

(Revised Index Numbers taking account of Cattle Subsidy Payments).

Month	1927	1928	1929	1930	1931	1932	1933	1934	1935	1936	1937	1938
January ...	—	—	—	—	—	—	—	—	81	82	83	100
February ...	—	—	—	—	—	—	—	—	77	83	84	99
March ...	—	—	—	—	—	—	—	—	76	82	89	97
April ...	—	—	—	—	—	—	—	—	77	82	100	97
May ...	—	—	—	—	—	—	—	—	79	82	101	95
June ...	—	—	—	—	—	—	—	—	80	85	99	95
July ...	—	—	—	—	—	—	—	—	82	89	100	94
August ...	—	—	—	—	—	—	—	—	81	90	105	93
September ...	—	—	—	—	—	—	—	—	83	89	102	93
October ...	—	—	—	—	—	—	—	92	85	91	103	94
November ...	—	—	—	—	—	—	—	89	86	89	105	91
December ...	—	—	—	—	—	—	—	85	84	87	107	88

Store Cattle.

Month	1927	1928	1929	1930	1931	1932	1933	1934	1935	1936	1937	1938
January ...	108	94	96	104	95	84	81	75	71	75	80	93
February ...	108	95	94	105	90	85	83	74	69	77	82	96
March ...	107	95	97	107	91	86	80	70	70	77	81	101
April ...	103	97	98	104	92	85	77	70	71	76	87	102
May ...	101	96	97	103	91	82	79	71	72	78	92	93
June ...	104	102	101	102	89	80	76	68	72	78	92	93
July ...	101	100	95	103	84	85	74	71	75	80	95	90
August ...	105	99	98	102	87	84	70	74	70	79	92	86
September ...	103	98	100	101	87	80	72	76	69	76	89	86
October ...	100	96	99	102	87	80	73	74	72	78	89	89
November ...	95	96	100	100	89	82	74	72	72	78	92	89
December ...	100	102	99	100	85	82	70	70	73	77	93	91

Fat Cows.

Month	1927	1928	1929	1930	1931	1932	1933	1934	1935	1936	1937	1938
January ...	108	92	98	94	92	80	73	72	60	60	61	77
February ...	101	95	93	96	83	81	73	73	61	61	60	77
March ...	104	93	96	102	84	82	71	66	59	64	66	75
April ...	105	101	98	97	81	82	66	69	57	64	66	79
May ...	108	101	96	93	82	84	67	63	61	65	72	71
June ...	104	102	95	89	85	88	62	62	62	62	74	68
July ...	110	90	95	92	78	82	68	68	61	65	75	69
August ...	108	94	94	96	86	73	65	69	57	67	78	62
September ...	108	89	95	97	82	72	64	71	59	65	77	67
October ...	100	91	95	100	79	72	65	67	63	66	76	64
November ...	100	91	91	95	79	74	69	65	63	64	75	64
December ...	96	97	95	88	79	76	69	60	66	66	71	60

Fat Sheep.

Month	1927	1928	1929	1930	1931	1932	1933	1934	1935	1936	1937	1938
January ...	108	100	91	97	84	59	55	61	52	59	61	59
February ...	113	101	89	99	79	55	59	58	56	58	59	66
March ...	103	102	88	91	81	64	59	51	58	55	61	63
April ...	95	100	87	91	78	64	57	53	59	54	71	58
May ...	95	108	87	86	78	60	53	57	57	58	69	66
June ...	96	110	91	88	73	55	55	58	57	57	70	60
July ...	105	105	94	90	76	51	47	63	56	61	68	60
August ...	100	102	98	86	75	51	48	64	58	59	75	52
September ...	112	111	94	84	71	46	52	57	58	62	71	55
October ...	109	100	108	83	56	38	54	59	71	68	72	59
November ...	94	100	101	81	49	52	62	65	60	66	82	44
December ...	98	104	96	86	51	49	60	61	60	61	58	52

Bacon Pigs.

Month	1927	1928	1929	1930	1931	1932	1933	1934	1935	1936	1937	1938
January ...	105	88	90	132	83	65	55	80	75	72	86	86
February ...	108	95	98	124	77	60	61	86	72	68	78	83
March ...	105	93	114	118	74	62	71	75	69	64	76	79
April ...	104	95	128	101	80	69	69	71	65	61	71	77
May ...	108	100	113	90	80	72	73	73	67	64	78	81
June ...	105	98	117	89	75	67	71	71	74	72	87	87
July ...	97	102	117	92	69	66	66	72	77	75	87	89
August ...	86	103	117	103	64	66	72	71	73	73	85	86
September ...	92	102	110	95	62	67	75	75	73	75	87	89
October ...	83	96	109	90	66	63	81	79	75	82	92	92
November ...	81	96	113	86	64	59	82	81	78	87	96	94
December ...	83	95	121	84	64	59	82	77	75	87	97	90

Hens and Chickens.

Month	1927	1928	1929	1930	1931	1932	1933	1934	1935	1936	1937	1938
January ...	104	103	96	93	97	78	78	63	68	67	64	72
February ...	103	102	96	93	96	79	77	62	65	69	64	71
March ...	96	95	93	92	92	80	74	66	69	71	67	75
April ...	97	95	90	92	93	82	71	66	66	73	67	76
May ...	99	93	90	90	92	80	74	67	65	73	73	77
June ...	101	95	92	91	89	77	73	69	66	70	71	76
July ...	99	93	93	91	94	81	70	69	65	65	71	66
August ...	105	103	102	93	90	81	72	65	64	66	76	64
September ...	105	101	95	90	88	79	68	64	63	61	73	65
October ...	107	108	98	83	85	77	68	63	62	63	74	67
November ...	111	107	97	83	85	76	67	63	62	66	75	69
December ...	106	99	93	84	86	78	63	64	71	70	81	80

Ducks.

Month	1927	1928	1929	1930	1931	1932	1933	1934	1935	1936	1937	1938
January ...	93	95	83	90	89	87	84	80	71	79	72	72
February ...	95	104	81	83	88	94	85	75	70	79	81	79
March ...	94	107	82	83	80	90	85	80	70	79	88	87
April ...	94	103	79	83	84	86	84	76	72	86	92	92
May ...	92	102	77	81	86	86	92	76	74	79	91	99
June ...	91	109	90	83	84	73	90	81	77	65	90	98
July ...	88	117	96	87	87	68	78	76	73	74	101	88
August ...	102	115	96	98	75	65	78	74	71	78	101	93
September ...	102	109	89	104	75	69	77	77	68	75	93	95
October ...	100	109	84	97	74	67	84	76	75	81	91	97
November ...	92	110	84	91	73	82	83	77	72	82	85	95
December ...	109	97	88	89	74	82	66	76	82	82	95	98

Eggs.

Month	1927	1928	1929	1930	1931	1932	1933	1934	1935	1936	1937	1938
January ...	111	141	101	108	88	83	72	72	72	81	69	92
February ...	118	112	111	101	87	76	84	74	79	85	90	92
March ...	99	99	138	93	92	83	80	69	76	82	98	85
April ...	99	106	109	107	85	84	73	80	81	82	90	98
May ...	100	110	121	95	85	77	77	72	80	91	82	108
June ...	101	103	103	96	74	82	79	81	87	89	93	108
July ...	98	91	118	106	91	89	77	73	72	90	107	115
August ...	89	101	115	98	83	76	79	82	85	93	93	101
September ...	102	101	105	90	82	90	82	71	85	87	101	104
October ...	104	95	114	104	82	81	77	75	79	96	88	90
November ...	102	105	106	92	92	81	80	74	77	75	86	84
December ...	128	120	121	87	73	73	69	67	83	78	95	79

Milk: For Manufacture.

Month	1927	1928	1929	1930	1931	1932	1933	1934	1935	1936	1937	1938
January ...	93	98	106	97	75	81	67	61	55	70	73	87
February ...	94	99	104	93	81	80	66	59	55	70	74	85
March ...	95	102	103	88	82	81	63	60	58	69	77	84
April ...	99	106	103	87	80	82	62	59	58	67	82	88
May ...	106	110	110	86	79	76	59	60	58	69	82	94
June ...	107	112	111	88	76	69	59	57	59	75	81	90
July ...	101	115	111	92	70	72	58	52	62	78	83	87
August ...	104	113	108	87	73	71	58	52	66	78	82	85
September ...	109	110	108	80	72	69	62	48	71	73	81	83
October ...	107	109	108	73	73	66	63	48	77	69	92	83
November ...	109	106	106	72	74	66	64	50	73	74	95	86
December ...	102	108	99	71	79	68	61	52	75	75	94	88

Milk: For Manufacture.

(Revised Index Numbers taking account of Bonus and Equalisation Payments).

Month	1927	1928	1929	1930	1931	1932	1933	1934	1935	1936	1937	1938
January ...	—	—	—	—	—	—	—	—	85	87	89	102
February ...	—	—	—	—	—	—	—	—	84	86	88	102
March ...	—	—	—	—	—	—	—	—	87	90	92	108
April ...	—	—	—	—	—	—	—	80	84	86	89	105
May ...	—	—	—	—	—	—	—	91	95	97	98	112
June ...	—	—	—	—	—	—	—	94	98	100	102	113
July ...	—	—	—	—	—	—	—	93	97	99	100	109
August ...	—	—	—	—	—	—	—	89	93	95	95	105
September ...	—	—	—	—	—	—	—	83	87	89	89	100
October ...	—	—	—	—	—	—	—	95	99	100	101	120
November ...	—	—	—	—	—	—	—	90	94	96	107	116
December ...	—	—	—	—	—	—	—	85	89	90	106	107

Milk: Whole.

Month	1927	1928	1929	1930	1931	1932	1933	1934	1935	1936	1937	1938
January ...	107	107	107	107	100	107	90	85	94	82	85	106
February ...	103	103	103	103	95	110	93	88	97	85	100	107
March ...	99	99	99	99	91	114	97	91	100	88	103	110
April ...	99	99	99	99	91	99	99	84	109	95	112	119
May ...	103	103	103	103	84	112	84	79	105	107	112	115
June ...	83	83	83	83	93	124	93	88	106	119	119	125
July ...	87	87	87	87	97	130	97	92	110	125	125	129
August ...	104	104	104	104	85	113	85	80	96	109	109	117
September ...	103	103	103	103	77	103	77	107	99	99	99	107
October ...	100	100	100	100	75	100	94	104	96	96	121	122
November ...	108	108	108	100	69	104	92	96	89	89	112	114
December ...	106	106	106	99	106	96	85	91	81	81	102	105

Farmers' Butter.

Month	1927	1928	1929	1930	1931	1932	1933	1934	1935	1936	1937	1938
January	97	102	106	102	77	70	62	52	52	71	63	82
February	98	100	107	99	77	67	61	51	58	69	64	82
March	97	107	112	98	78	67	58	51	59	65	63	80
April	95	106	108	91	78	69	59	51	59	65	66	81
May	99	105	107	87	75	71	59	54	59	66	67	85
June	95	105	101	90	68	70	58	56	62	70	71	88
July	98	99	103	89	76	71	58	56	62	68	74	89
August	99	99	104	89	79	69	57	56	61	68	78	85
September	100	99	103	85	68	67	60	55	63	67	76	86
October	102	99	101	81	66	65	60	54	63	67	74	76
November	98	97	99	79	66	64	60	53	76	66	90	74
December	100	102	101	77	68	63	55	52	75	65	90	75

Wool.

Month	1927	1928	1929	1930	1931	1932	1933	1934	1935	1936	1937	1938
January	95	—	100	—	—	37	22	—	41	45	82	83
February	87	106	94	—	—	33	—	—	—	41	84	63
March	87	102	107	—	—	32	—	—	39	41	91	61
April	90	104	108	—	—	—	—	—	39	—	98	60
May	88	100	99	59	40	—	—	42	38	46	98	50
June	94	109	103	56	38	21	27	42	41	57	113	44
July	98	114	101	52	39	17	33	39	40	58	112	47
August	100	108	100	49	33	18	37	40	41	61	117	55
September	97	106	98	44	35	19	38	40	43	61	118	54
October	97	93	96	44	35	22	38	40	45	61	101	57
November	—	90	85	—	35	23	35	39	44	68	89	58
December	96	94	—	—	33	22	34	38	42	68	74	57

TABLE III.

Monthly Index Numbers of Prices of Livestock and Livestock Products, 1927 to 1938, Uncorrected for Seasonal Variation. (Base 1927-29 = 100).

Fat Cattle.

Month	1927	1928	1929	1930	1931	1932	1933	1934	1935	1936	1937	1938
January ...	102	101	100	105	95	90	85	84	72	73	74	90
February ...	104	107	99	107	92	91	87	81	69	75	75	89
March ...	104	110	101	108	91	96	84	79	68	74	81	88
April ...	106	116	110	108	94	97	80	75	70	76	94	90
May ...	107	124	109	103	99	99	82	77	74	78	98	90
June ...	106	121	106	104	102	91	79	79	75	81	95	90
July ...	104	110	98	102	95	92	74	77	74	80	92	85
August ...	101	97	95	98	88	86	71	79	68	78	92	80
September ...	96	91	90	94	83	78	67	75	67	72	84	74
October ...	86	85	87	90	80	68	67	70	64	69	80	72
November ...	83	90	88	90	80	70	69	68	65	68	82	70
December ...	85	99	100	93	88	79	74	71	71	73	92	74

Fat Cattle.

(Revised Index Numbers taking account of Cattle Subsidy Payments).

Month	1927	1928	1929	1930	1931	1932	1933	1934	1935	1936	1937	1938
January ...	—	—	—	—	—	—	—	—	83	84	85	102
February ...	—	—	—	—	—	—	—	—	80	86	86	101
March ...	—	—	—	—	—	—	—	—	79	85	92	100
April ...	—	—	—	—	—	—	—	—	81	87	105	102
May ...	—	—	—	—	—	—	—	—	85	89	109	102
June ...	—	—	—	—	—	—	—	—	86	92	106	102
July ...	—	—	—	—	—	—	—	—	85	91	103	97
August ...	—	—	—	—	—	—	—	—	79	89	103	92
September ...	—	—	—	—	—	—	—	—	78	83	95	87
October ...	—	—	—	—	—	—	—	81	75	80	91	84
November ...	—	—	—	—	—	—	—	79	76	79	94	82
December ...	—	—	—	—	—	—	—	82	82	84	104	87

Store Cattle.

Month	1927	1928	1929	1930	1931	1932	1933	1934	1935	1936	1937	1938
January ...	106	92	94	101	93	82	79	73	69	73	78	91
February ...	107	94	93	104	89	84	82	74	68	76	81	95
March ...	106	94	97	106	90	85	80	70	70	76	81	100
April ...	104	97	98	104	92	85	77	71	71	77	87	102
May ...	103	97	98	104	92	83	80	71	72	79	93	95
June ...	109	107	106	107	94	84	80	71	76	82	97	98
July ...	103	103	98	106	86	88	76	73	77	82	97	93
August ...	107	101	101	104	90	87	72	76	72	81	94	88
September ...	103	98	101	102	87	80	72	76	70	77	90	86
October ...	98	94	97	100	86	78	72	73	70	77	88	87
November ...	92	93	96	97	86	79	72	70	69	75	89	87
December ...	97	98	96	97	82	79	68	68	70	75	90	87

Fat Cows.

Month	1927	1928	1929	1930	1931	1932	1933	1934	1935	1936	1937	1938
January ...	113	97	102	98	96	84	76	75	62	63	64	80
February ...	108	101	99	103	89	87	79	78	65	66	64	82
March ...	109	98	101	107	88	86	75	70	62	67	70	79
April ...	109	106	103	102	85	86	69	72	60	67	70	83
May ...	113	105	100	97	86	87	70	65	64	68	76	74
June ...	108	106	98	92	88	91	65	64	64	64	76	71
July ...	107	88	93	90	76	80	66	67	60	63	74	68
August ...	102	89	89	91	82	69	62	66	54	63	74	59
September ...	102	84	90	92	77	68	60	67	55	61	73	63
October ...	92	84	87	92	73	66	60	61	58	61	70	60
November ...	93	84	84	88	73	69	64	61	59	59	70	60
December ...	94	95	93	86	77	74	67	59	65	65	69	59

Fat Sheep.

Month	1927	1928	1929	1930	1931	1932	1933	1934	1935	1936	1937	1938
January ...	107	99	90	95	83	58	54	60	51	58	60	59
February ...	118	105	93	103	82	58	62	61	58	60	61	68
March ...	115	114	98	102	91	71	65	57	65	61	68	70
April ...	112	118	103	108	93	76	68	62	69	64	84	70
May ...	107	122	98	97	88	68	60	65	65	66	78	74
June ...	102	117	96	93	77	58	58	62	60	61	74	63
July ...	102	102	91	88	73	49	46	61	54	59	66	58
August ...	90	92	88	77	67	46	43	57	52	53	68	46
September ..	103	102	86	77	65	43	48	52	53	57	65	50
October ..	95	87	95	73	49	33	47	52	62	59	63	52
November ..	83	89	90	72	44	46	55	57	53	59	73	40
December ...	91	97	89	80	47	45	56	57	56	57	54	48

Bacon Pigs.

Month	1927	1928	1929	1930	1931	1932	1933	1934	1935	1936	1937	1938
January ...	103	87	89	130	81	64	54	79	74	71	84	86
February ...	113	99	102	129	81	62	64	90	75	71	82	86
March ...	116	103	126	132	83	69	80	83	77	71	85	87
April ...	121	110	148	118	93	80	80	83	75	71	83	87
May ...	119	110	124	98	88	79	80	80	73	71	85	87
June ...	105	98	117	89	75	67	71	71	74	72	87	87
July ...	94	99	114	89	67	64	64	69	75	73	85	86
August ...	84	101	114	100	63	64	71	70	72	72	83	85
September ...	88	97	105	91	59	65	71	72	70	72	83	85
October ...	75	88	99	82	60	58	74	72	68	75	84	85
November ...	73	86	101	77	58	53	73	72	69	78	85	84
December ...	74	85	108	75	57	52	73	68	67	77	86	82

Hens and Chickens.

Month	1927	1928	1929	1930	1931	1932	1933	1934	1935	1936	1937	1938
January ...	111	110	102	99	104	83	83	67	73	72	68	76
February ...	110	109	103	99	102	85	82	66	70	74	68	75
March ...	103	102	100	98	98	86	80	71	73	76	72	80
April ...	102	100	95	97	98	86	75	69	70	77	70	81
May ...	101	95	91	91	93	81	75	68	66	74	74	80
June ...	99	93	90	90	87	76	72	67	65	69	70	75
July ...	95	89	89	87	90	77	66	66	63	62	68	63
August ...	94	93	92	84	81	73	65	58	58	60	68	58
September ...	100	96	90	85	83	75	64	61	59	58	69	61
October ...	101	102	93	78	80	72	64	60	59	59	70	63
November ...	105	101	92	79	81	72	64	60	59	63	71	65
December ...	111	104	98	89	90	82	66	67	75	73	85	84

Ducks.

Month	1927	1928	1929	1930	1931	1932	1933	1934	1935	1936	1937	1938
January ...	98	99	86	95	93	91	88	83	74	83	75	75
February ...	95	104	81	84	88	94	85	75	70	79	82	79
March ...	92	105	81	82	79	89	84	79	69	78	87	85
April ...	90	98	75	79	80	82	80	73	68	82	87	88
May ...	87	97	74	77	82	82	88	72	70	75	87	95
June ...	90	108	89	82	83	72	89	80	76	64	88	96
July ...	88	118	97	88	88	68	79	76	73	74	101	89
August ...	101	115	96	98	74	64	77	74	70	78	101	92
September ...	100	107	87	102	73	68	76	76	67	73	92	93
October ...	99	107	83	96	73	66	83	75	74	80	90	96
November ...	91	108	82	89	72	81	82	76	71	81	84	95
December ...	122	108	99	100	83	92	74	86	92	92	107	109

Turkeys.

Month	1927	1928	1929	1930	1931	1932	1933	1934	1935	1936	1937	1938
January ...	60	77	85	78	83	—	58	48	64	—	67	80
February ...	58	67	72	58	83	—	—	45	—	—	—	—
March ...	63	49	63	44	—	—	—	—	—	—	—	—
April ...	62	67	44	43	—	—	—	—	—	—	—	—
May ...	60	54	60	44	—	—	—	—	—	—	—	—
June ...	—	—	42	45	—	—	—	—	—	—	—	—
July ...	26	—	26	42	—	—	—	—	—	—	—	—
August ...	—	22	32	—	—	—	—	—	—	—	—	—
September ...	29	32	26	—	—	—	—	—	—	—	—	—
October ...	57	81	62	45	—	—	—	—	—	—	97	—
November ...	76	67	86	45	64	72	67	45	73	101	97	75
December ...	114	101	87	94	132	91	59	68	106	98	91	93

Eggs.

Month	1927	1928	1929	1930	1931	1932	1933	1934	1935	1936	1937	1938
January ...	122	154	111	118	96	91	79	79	79	89	76	95
February ...	108	103	102	93	80	69	78	68	73	78	83	84
March ...	62	62	86	58	57	52	50	43	48	51	61	55
April ...	59	63	65	63	50	49	43	47	48	48	53	58
May ...	62	69	76	59	53	48	48	45	50	57	51	67
June ...	69	71	71	66	51	56	54	55	60	61	64	75
July ...	80	74	96	87	74	73	63	59	59	73	87	95
August ...	88	100	114	97	82	75	78	81	84	92	92	103
September ...	113	112	116	100	90	99	90	78	94	96	112	117
October ...	146	133	161	147	116	114	109	105	112	135	124	129
November ...	174	178	181	156	158	137	136	126	131	127	146	143
December ...	183	173	174	124	105	105	99	96	119	111	136	111

Milk: For Manufacture.

Month	1927	1928	1929	1930	1931	1932	1933	1934	1935	1936	1937	1938
January ...	106	113	121	111	86	93	77	70	63	81	84	100
February ...	109	115	121	109	95	93	76	69	64	82	86	99
March ...	106	113	115	98	91	90	71	66	65	77	85	94
April ...	98	105	102	86	79	81	61	59	57	66	81	87
May ...	93	96	96	75	69	66	52	52	50	60	72	82
June ...	90	94	93	74	64	58	49	48	49	63	68	75
July ...	86	98	94	78	60	61	49	44	53	67	70	75
August ...	93	101	96	77	65	64	51	46	59	70	74	76
September ...	104	106	103	77	68	66	59	46	68	70	78	79
October ...	107	109	108	74	73	66	63	48	77	69	92	82
November ...	115	112	112	76	78	69	67	53	77	78	100	90
December ...	115	121	111	80	88	77	68	58	84	84	105	99

Milk: For Manufacture.

(Revised Index Numbers taking account of Bonus and Equalisation Payments).

Month	1927	1928	1929	1930	1931	1932	1933	1934	1935	1936	1937	1938
January ...	—	—	—	—	—	—	—	—	98	100	101	117
February ...	—	—	—	—	—	—	—	—	97	100	102	119
March ...	—	—	—	—	—	—	—	—	98	101	103	120
April ...	—	—	—	—	—	—	—	79	82	85	88	104
May ...	—	—	—	—	—	—	—	79	83	85	86	98
June ...	—	—	—	—	—	—	—	79	83	84	85	94
July ...	—	—	—	—	—	—	—	79	83	84	85	94
August ...	—	—	—	—	—	—	—	79	83	84	85	94
September ...	—	—	—	—	—	—	—	79	83	85	85	95
October ...	—	—	—	—	—	—	—	95	99	101	101	119
November ...	—	—	—	—	—	—	—	95	99	101	113	120
December ...	—	—	—	—	—	—	—	95	99	101	119	121

Milk: Whole.

Month	1927	1928	1929	1930	1931	1932	1933	1934	1935	1936	1937	1938
January ...	125	125	125	125	117	125	106	100	110	96	100	121
February ...	117	117	117	117	108	125	106	100	110	96	112	121
March ...	108	108	108	108	100	125	106	100	110	96	112	121
April ...	100	100	100	100	92	100	100	102	110	96	112	121
May ...	92	92	92	92	75	100	75	71	94	96	100	104
June ...	67	67	67	67	75	100	75	71	85	96	96	104
July ...	67	67	67	67	75	100	75	71	85	96	96	104
August ...	92	92	92	92	75	100	75	71	85	96	96	104
September ...	100	100	100	100	75	100	75	104	96	96	96	104
October ...	100	100	100	100	75	100	112	104	96	96	121	121
November ...	117	117	117	108	75	112	100	104	96	96	121	121
December ...	125	125	125	117	125	112	100	108	96	96	121	121

Farmers' Butter.

Month	1927	1928	1929	1930	1931	1932	1933	1934	1935	1936	1937	1938
January ...	102	107	111	106	81	74	65	55	55	75	66	86
February ...	105	107	114	105	82	72	65	55	62	73	68	86
March ...	104	113	120	105	83	71	62	54	64	70	68	85
April ...	101	112	115	97	83	74	63	54	63	69	70	86
May ...	97	106	108	87	75	72	59	54	59	67	68	85
June ...	89	96	95	84	64	66	54	52	58	65	67	83
July ...	89	90	92	81	63	64	52	51	56	61	67	81
August ...	90	91	95	81	64	63	52	51	55	63	70	81
September ...	95	94	97	81	65	63	57	52	60	63	72	82
October ...	100	98	99	80	65	64	60	53	67	66	73	76
November ...	99	99	100	80	67	65	60	54	77	67	91	76
December ...	104	106	105	80	70	65	57	54	78	67	93	78

Wool.

Month	1927	1928	1929	1930	1931	1932	1933	1934	1935	1936	1937	1938
January ...	90	—	95	—	—	35	21	—	39	43	78	77
February ...	90	110	97	—	—	34	—	—	—	43	87	65
March ...	89	105	110	—	—	33	—	—	40	42	93	63
April ...	92	107	110	—	—	—	—	—	40	—	100	62
May ...	95	108	107	63	44	—	—	46	41	50	106	54
June ...	93	108	103	55	38	20	26	41	41	57	112	44
July ...	97	112	99	51	32	17	32	38	39	57	110	46
August ...	96	103	95	47	31	18	36	38	39	59	112	53
September ...	93	102	94	42	34	18	36	39	41	58	113	53
October ...	93	89	92	42	33	21	36	38	43	59	97	55
November ...	—	90	85	—	35	23	35	39	44	68	89	58
December ...	99	96	—	—	34	22	35	39	43	70	76	57

TABLE IV.

Prices used in the Calculation of the Indices.

Fat Cattle.

(per Live Cwt.)

Month	1927	1928	1929	1930	1931	1932	1933	1934	1935	1936	1937	1938
	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.
January ...	46 2	45 7	45 3	47 5	42 10	40 7	38 7	38 0	32 5	33 2	33 7	40 9
February ...	47 1	48 4	44 11	48 2	41 9	41 4	39 6	36 9	31 2	33 10	34 1	40 4
March ...	47 2	49 7	45 10	49 0	41 3	43 2	38 1	35 6	30 8	33 5	36 6	39 9
April ...	48 0	52 7	49 8	48 10	42 5	43 11	36 0	34 0	31 9	34 2	42 7	40 7
May ...	48 5	55 10	49 3	46 8	44 9	44 9	36 11	35 0	33 7	35 2	44 4	40 8
June ...	48 1	54 10	47 11	47 2	46 2	40 11	35 7	35 6	33 11	36 6	43 1	40 6
July ...	47 0	49 6	44 2	45 11	43 0	41 8	33 5	34 9	33 4	36 3	41 7	38 5
August ...	45 7	43 10	42 11	44 6	44 0	38 11	32 0	35 6	30 10	35 2	41 5	36 0
September ...	43 6	41 0	40 10	42 8	37 5	35 2	30 6	33 9	30 3	32 8	37 11	33 7
October ...	38 9	38 6	39 5	40 10	36 2	30 10	30 6	31 9	28 11	31 4	36 3	32 4
November ...	37 7	40 8	40 0	40 7	36 1	31 7	31 0	30 9	29 6	30 11	37 3	31 7
December ...	38 6	44 9	45 1	42 3	39 8	35 11	33 6	32 3	32 0	33 1	41 6	33 4
Calendar Year	44 1	46 9	44 9	45 7	41 0	39 2	34 8	34 7	31 5	33 9	38 7	37 4
		45 2										

Store Cattle.

(per Head).

Month	1927	1928	1929	1930	1931	1932	1933	1934	1935	1936	1937	1938
	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.
January ...	236 1	204 8	209 7	226 8	208 1	182 10	176 10	162 11	155 5	162 11	174 1	203 10
February ...	238 10	209 11	208 10	233 1	198 10	188 4	183 7	164 7	153 1	169 2	181 0	212 8
March ...	237 5	210 6	215 10	238 0	201 4	190 5	178 4	156 2	155 6	170 8	180 4	224 0
April ...	231 6	216 10	219 1	233 7	206 10	189 5	173 0	157 8	159 6	171 1	194 5	229 1
May ...	229 4	217 8	220 1	232 4	206 1	186 8	178 1	159 8	162 1	176 4	207 11	213 4
June ...	243 10	239 10	236 4	238 7	209 1	188 1	179 0	159 7	169 7	183 4	216 0	218 4
July ...	230 10	230 0	218 8	236 2	193 0	195 8	170 4	162 11	172 4	182 7	216 11	207 10
August ...	239 10	226 8	225 7	233 2	200 7	193 7	160 0	170 0	160 0	181 7	210 0	197 0
September ...	231 0	220 2	225 7	227 1	194 6	179 5	161 11	170 5	155 11	171 7	201 2	193 1
October ...	219 2	210 2	217 8	224 0	192 2	175 0	160 7	162 11	157 5	171 11	195 11	195 5
November ...	205 2	208 11	215 6	216 2	193 1	176 8	160 8	156 7	155 4	168 5	199 7	194 1
December ...	216 7	220 0	214 7	216 0	184 4	176 8	151 1	152 6	157 1	167 7	201 8	195 7
Calendar Year	230 11	219 7	220 5	230 1	199 5	184 8	169 11	161 1	159 11	173 4	198 4	207 10
		223 7										

Fat Cows.

(per Head).

Month	1927	1928	1929	1930	1931	1932	1933	1934	1935	1936	1937	1938
	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.
January ...	380 7	325 5	344 6	331 7	324 10	281 10	257 5	252 6	209 7	212 1	215 11	269 11
February ...	365 5	341 6	335 0	348 1	299 6	294 2	265 5	263 4	219 1	221 2	215 1	275 1
March ...	365 10	330 2	340 0	361 1	297 5	290 0	252 10	234 11	209 5	226 7	234 10	267 5
April ...	368 1	356 1	348 0	343 4	285 8	288 11	233 10	243 4	202 5	227 4	234 10	278 7
May ...	381 8	355 0	336 5	325 6	288 0	293 11	234 10	220 5	214 10	229 2	254 4	248 2
June ...	362 4	355 11	331 0	311 1	296 6	307 2	217 4	216 5	215 1	216 11	257 0	238 2
July ...	360 10	295 11	311 11	304 5	256 8	268 5	223 1	224 1	200 10	212 11	247 8	227 5
August ...	343 11	299 5	298 10	305 2	275 11	232 10	208 6	221 5	181 1	212 10	250 7	197 11
September ...	343 1	282 11	301 6	308 5	259 2	229 0	201 11	226 10	185 10	206 4	246 0	211 10
October ...	309 10	282 10	293 0	308 8	245 1	222 10	201 11	206 2	195 8	204 2	236 7	200 7
November ...	312 6	284 1	283 7	296 7	247 2	232 1	215 6	204 0	197 8	198 10	234 5	200 8
December ...	315 7	319 7	312 11	290 10	260 2	249 10	226 10	197 4	217 6	218 8	233 8	199 4
endar Ye ar	356 1	326 0	328 2	324 8	280 2	271 8	230 0	228 4	205 11	216 10	238 10	234 1
		336 10										

Fat Sheep.
(per Head).

Month	1927	1928	1929	1930	1931	1932	1933	1934	1935	1936	1937	1938
	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.
January ...	57 3	52 11	48 0	51 0	44 2	31 0	29 1	32 3	27 6	31 0	32 0	31 4
February ...	62 11	56 5	49 11	55 2	43 11	31 1	33 2	32 7	31 1	32 3	32 10	36 7
March ...	61 8	60 11	52 7	54 4	48 8	38 2	35 0	30 8	34 9	32 7	36 6	37 6
April ...	60 2	63 3	55 0	57 7	49 7	40 9	36 4	33 5	37 0	34 1	44 10	37 2
May ...	57 3	65 5	52 4	51 9	47 0	36 6	32 3	34 7	34 8	35 3	41 11	39 7
June ...	54 5	62 5	51 3	50 0	41 5	31 2	31 3	33 1	32 4	32 5	39 8	33 11
July ...	54 7	54 4	48 9	46 10	39 3	26 6	24 6	32 10	28 9	31 6	35 1	31 1
August ...	48 1	49 0	47 2	41 2	35 11	24 6	23 0	30 9	28 0	28 5	36 2	24 10
September ...	55 0	54 6	46 1	41 4	34 10	22 10	25 7	28 0	28 5	30 4	34 11	26 11
October ...	50 10	46 8	50 7	38 10	26 4	17 9	25 1	27 9	33 5	31 10	33 8	27 11
November ...	44 7	47 8	47 11	38 8	23 5	24 7	29 6	30 8	28 7	31 6	39 1	21 5
December ...	48 8	51 9	47 6	42 8	25 1	24 1	29 10	30 4	29 11	30 3	28 9	25 10
Calendar Year	55 10	55 6	49 2	48 10	40 1	31 7	30 10	31 11	32 0	32 1	36 10	32 3
		53 6										

Bacon Pigs.
(per Dead Cwt.)

Month	1927	1928	1929	1930	1931	1932	1933	1934	1935	1936	1937	1938
	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.
January ...	80 11	68 1	69 10	102 3	64 1	50 2	42 2	61 10	58 3	55 7	66 5	67 4
February ...	88 9	78 3	80 5	101 8	63 5	49 2	50 7	70 8	59 0	56 1	64 5	68 0
March ...	91 8	81 3	99 6	103 6	65 1	54 5	62 7	65 7	60 3	56 2	66 9	68 3
April ...	95 2	86 4	116 5	92 6	73 2	63 2	63 0	65 0	59 0	55 11	65 1	68 9
May ...	93 4	86 6	97 7	77 4	69 3	61 11	62 11	63 1	57 9	55 7	67 1	68 8
June ...	82 11	77 2	91 11	69 11	59 1	52 11	55 11	55 7	58 4	56 8	68 3	68 4
July ...	74 2	78 2	89 5	70 4	52 7	50 3	50 6	54 7	58 9	57 1	66 7	67 6
August ...	66 5	79 2	90 1	78 11	49 5	50 7	55 7	54 10	56 5	56 4	65 1	66 9
September ...	69 0	76 8	82 11	71 5	46 5	50 9	56 3	56 6	54 9	56 7	65 5	66 8
October ...	59 2	68 11	78 0	64 2	47 3	45 3	57 11	56 10	53 8	58 11	66 1	66 10
November ...	57 2	67 5	79 5	60 4	45 5	41 5	57 7	56 7	54 7	61 3	67 3	66 1
December ...	58 6	66 9	85 1	58 11	44 8	41 1	57 7	53 10	52 5	60 9	68 0	64 7
Calendar Year	74 0	75 7	86 6	77 2	55 6	50 6	55 2	59 1	56 7	57 5	66 5	67 3
		78 8										

Hens and Chickens.
(per Head).

Month	1927	1928	1929	1930	1931	1932	1933	1934	1935	1936	1937	1938
	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.
January ...	3 4½	3 4	3 1½	3 0½	3 2	2 6½	2 6½	2 0½	2 2½	2 2½	2 1	2 4
February ...	3 4½	3 3¾	3 1½	3 0½	3 1½	2 7	2 6	2 0⅝	2 1½	2 3	2 0	2 3½
March ...	3 1½	3 1½	3 0½	3 0	3 0	2 7½	2 5¼	2 2	2 2¾	2 3⅜	2 2½	2 5½
April ...	3 1½	3 0⅜	2 10½	2 11½	2 11¾	2 7½	2 3½	2 1½	2 1½	2 4½	2 1½	2 5½
May ...	3 0⅜	2 10½	2 9¼	2 9¼	2 10	2 5¼	2 3¼	2 1	2 0	2 3½	2 3½	2 5
June ...	3 0½	2 10	2 9	2 8¾	2 7¾	2 3¾	2 2½	2 0½	1 11½	2 1	2 1⅝	2 3½
July ...	2 10¾	2 8½	2 8½	2 7¾	2 8¼	2 4¼	2 0¼	2 0	1 10⅝	1 11½	2 0⅜	1 11
August ...	2 10½	2 9¼	2 9½	2 6¾	2 5⅝	2 2½	1 11⅜	1 9¼	1 9¼	1 9¾	2 1	1 9
September ...	3 0½	2 11	2 8¾	2 7	2 6½	2 3½	1 11½	1 11½	1 9½	1 9	2 1½	1 10½
October ...	3 1	3 1¼	2 9¾	2 4⅜	2 5½	2 2¼	1 11½	1 9½	1 9½	1 9¾	2 1⅝	1 10¾
November ...	3 2¼	3 1	2 9¾	2 4⅜	2 5½	2 2¼	1 11½	1 9½	1 9½	1 11	2 2	1 11¾
December ...	3 4⅜	3 2	3 0	2 8½	2 9	2 6	2 0½	2 0½	2 3½	2 2¾	2 7¼	2 6¾
Calendar Year	3 2¼	3 0⅜	2 10¾	2 8½	2 9	2 5	2 1¾	1 11⅛	2 0	2 1½	2 2½	2 2½
		3 0½										

Ducks.
(per Head).

Month	1927	1928	1929	1930	1931	1932	1933	1934	1935	1936	1937	1938
	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.
January ...	2 5¾	2 6½	2 2½	2 5	2 4¼	2 4	2 3	2 1½	1 10½	2 1½	1 11	1 10¾
February ...	2 5½	2 7⅜	2 0¾	2 1½	2 3	2 4⅜	2 2	1 11	1 9½	2 0½	2 1	2 0⅜
March ...	2 4¼	2 8¼	2 0¾	2 1	2 0¼	2 3¼	2 1½	2 0	1 9¼	1 11¾	2 2½	2 2
April ...	2 3½	2 5⅞	1 11	2 0	2 0½	2 1	2 0½	1 10¼	1 8⅜	2 1	2 2½	2 3
May ...	2 2⅞	2 5⅛	1 10½	1 11⅜	2 1	2 1	2 2⅜	1 10¼	1 9½	1 11	2 2½	2 5
June ...	2 3½	2 8¾	2 3¼	2 1	2 1⅞	1 9¾	2 3¼	2 0½	1 11	1 7½	2 3	2 5¼
July ...	2 3	3 0	2 5½	2 2⅜	2 2¾	1 8½	2 0	1 11¼	1 10¼	1 10½	2 6¾	2 3½
August ...	2 7	2 11½	2 5¼	2 6	1 10¾	1 7¾	1 11¾	1 10¾	1 9½	1 11½	2 6¼	2 4½
September ...	2 6⅜	2 8½	2 2½	2 7½	1 10½	1 8¾	1 11	1 11	1 8½	1 10½	2 4	2 4½
October ...	2 6½	2 8¾	2 1½	2 5⅞	1 10½	1 8¼	2 1½	1 11	1 10½	2 0½	2 3½	2 5¼
November ...	2 3¾	2 9¼	2 1¼	2 3¼	1 10	2 0⅜	2 1	1 11¼	1 9⅜	2 0½	2 1½	2 5
December ...	3 1½	2 9	2 6¼	2 6½	2 1½	2 4½	1 10½	2 2¼	2 4¼	2 4	2 8½	2 9½
Calendar Year	2 7¾	2 8¾	2 3	2 4¼	2 1	2 1¼	2 0½	2 0¼	2 0½	2 1⅜	2 5½	2 6
		2 6½										

Turkeys.
(per Head).

Month	1927	1928	1929	1930	1931	1932	1933	1934	1935	1936	1937	1938
	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.
January ...	9 3¾	11 11⅜	13 3½	12 2½	13 0	—	9 0	7 5¾	10 0	—	10 6	12 5¾
February ...	9 0	10 5½	11 4	9 0½	13 0	—	—	7 0	—	—	—	—
March ...	9 10½	7 7	9 10½	6 10¼	—	—	—	—	—	—	—	—
April ...	9 7½	10 5¼	6 10¾	6 9	—	—	—	—	—	—	—	—
May ...	9 5¼	8 4½	9 4½	6 10	—	—	—	—	—	—	—	—
June ...	—	—	6 7	7 0	—	—	—	—	—	—	—	—
July ...	4 0	—	4 0	6 7¼	—	—	—	—	—	—	—	—
August ...	—	3 6	5 0	—	—	—	—	—	—	—	—	—
September ...	4 6	5 0	4 0	—	—	—	—	—	—	—	—	—
October ...	8 10¾	12 7¾	9 8½	7 0	—	—	—	—	—	—	15 1½	—
November ...	11 10½	10 5	13 6	7 0½	10 0¾	11 2¾	10 5	7 0	11 5	15 8½	15 2	11 8
December ...	17 9½	15 9¾	13 6½	14 7¾	20 8¼	14 3	9 3	10 6¾	16 6½	15 4	14 3½	14 7¼
Calendar Year	17 8	15 8¾	13 6¼	14 5	20 6½	14 2½	9 3	10 4¾	16 4½	15 4¼	14 3¼	14 6¾
		15 7½										

Eggs.
(per 120).

Month	1927	1928	1929	1930	1931	1932	1933	1934	1935	1936	1937	1938
	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.
January ...	16 5	20 8	14 11	15 10	12 11	12 2	10 7	10 7	10 7	11 11	10 3	12 9
February ...	14 7	13 10	13 9	12 7	10 9	9 4	10 5	9 2	9 10	10 6	11 1	11 5
March ...	8 4	8 4	11 7	7 10	7 9	7 0	6 9	5 9	6 5	6 11	8 3	7 4
April ...	7 11	8 5	8 8	8 6	6 9	6 8	5 10	6 4	6 5	6 6	7 2	7 10
May ...	8 5	9 3	10 2	8 0	7 2	6 6	6 6	6 1	6 6	7 8	6 11	9 0
June ...	9 4	9 7	9 7	8 10	6 11	7 7	7 4	7 6	8 1	8 3	8 7	10 1
July ...	10 9	10 0	12 11	11 8	10 0	9 10	8 5	8 0	7 11	9 10	11 8	12 10
August ...	11 11	13 6	15 4	13 0	11 1	10 1	10 6	10 11	11 4	12 5	12 5	13 10
September ...	15 3	15 1	15 8	13 5	12 2	13 5	12 2	10 7	12 7	12 11	15 0	15 8
October ...	19 9	17 11	21 8	19 9	15 7	15 4	14 8	14 2	15 1	18 3	16 9	17 5
November ...	23 5	24 0	24 5	21 1	21 3	18 6	18 4	17 0	17 9	17 2	19 8	19 2
December ...	24 7	23 3	23 5	16 9	14 2	14 2	13 5	13 0	16 0	15 0	18 4	14 11
Calendar Year	13 3	13 2	14 0	11 0	9 7	9 2	9 0	8 5	9 2	9 9	10 7	11 1
		13 6										

Milk: For Manufacture.
(per Gallon).

Month	1927	1928	1929	1930	1931	1932	1933	1934	1935	1936	1937	1938
	d.	d.	d.	d.	d.	d.	d.	d.	d.	d.	d.	d.
January ...	6¾	7	7½	7	5½	6	4⅝	4½	4	5	5¼	6½
February ...	7	7¼	7¾	6¾	6	6	4⅝	4½	4	5¼	5⅓	6½
March ...	6⅝	7¼	7½	6½	5⅝	5⅝	4½	4½	4¼	4⅜	5⅓	6
April ...	6½	6⅞	6⅞	5½	5	5	3¾	3⅝	3⅜	4⅓	5	5⅓
May ...	5⅝	6	6	4⅝	4¼	4¼	3¼	3¼	3⅜	3⅝	4½	5¼
June ...	5⅝	6	6	4⅝	4	3⅝	3¼	3	3	4	4¼	4⅝
July ...	5⅜	6¼	6	5	3⅝	4	3	2⅝	3¼	4¼	4¼	4¼
August ...	5⅜	6½	6	5	4¼	4	3¼	3	3⅝	4⅝	4⅓	4⅓
September ...	6¼	6⅝	6⅝	4⅝	4¼	4¼	3⅝	3	4¼	4⅝	5	5
October ...	6⅝	6⅝	6⅝	4⅝	4½	4¼	4	3	4⅝	4⅝	5⅜	5½
November	7¼	7	7	4⅝	5	4¼	4¼	3½	4⅝	5	6½	5⅝
December ...	7¼	7¾	7	5	5½	4⅝	4¼	3⅝	5¼	5½	6⅝	6¼
Calendar Year	6	6½	6¼	5	4½	4¼	3½	3¼	3⅜	4½	5	5¼
	6¼											

Milk: Whole.
(per Gallon).

Month	1927	1928	1929	1930	1931	1932	1933	1934	1935	1936	1937	1938
	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.
January ...	1 3	1 3	1 3	1 3	1 2	1 3	1 0⅜	1 0	1 1½	0 11½	1 0	1 2½
February ...	1 2	1 2	1 2	1 2	1 1	1 3	1 0¼	1 0	1 1½	0 11½	1 1½	1 2½
March ...	1 1	1 1	1 1	1 1	1 0	1 3	1 0¾	1 0	1 1½	0 11⅜	1 1⅜	1 2½
April ...	1 0	1 0	1 0	1 0	11	1 0	1 0	10¼	1 1¼	0 11½	1 1⅜	1 2½
May ...	0 11	0 11	0 11	0 11	0 9	1 0	0 9	0 8½	0 11¼	0 11½	1 0	1 0½
June ...	0 8	0 8	0 8	0 8	0 9	1 0	0 9	0 8¼	0 10¼	0 11½	0 11½	1 0½
July ...	0 8	0 8	0 8	0 8	0 9	1 0	0 9	0 8½	0 10¼	0 11½	0 11½	1 0½
August ...	0 11	0 11	0 11	0 11	0 9	1 0	0 9	0 8½	0 10½	0 11½	0 11¼	1 0½
September ...	1 0	1 0	1 0	1 0	0 9	1 0	0 9	1 0¼	0 11¼	0 11½	0 11½	1 0½
October ...	1 0	1 0	1 0	1 0	0 9	1 0	0 11¼	1 0½	0 11½	0 11½	1 2½	1 2½
November ...	1 2	1 2	1 2	1 1	0 9	1 1½	1 0	1 0½	0 11½	0 11½	1 2½	1 2½
December ...	1 3	1 3	1 3	1 2	1 3	1 1½	1 0	1 1	0 11½	0 11½	1 2½	1 2½
Calendar Year	1 0	1 0	1 0	1 0	0 10¾	1 1	0 11	0 11	0 11	0 11½	1 0¾	1 1¾
	1 0											

Farmers' Butter.
(per Pound).

Month	1927	1928	1929	1930	1931	1932	1933	1934	1935	1936	1937	1938
	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.
January ...	1 6	1 6¾	1 7½	1 6¾	1 2½	1 1	0 11½	0 9½	0 9½	1 1	0 11¾	1 3
February ...	1 6¼	1 6¾	1 8	1 6½	1 2¼	1 0½	0 11½	0 9½	0 11	1 0¾	1 0	1 3
March ...	1 6½	1 7¼	1 9	1 6½	1 2½	1 0½	0 10¾	0 9½	0 11¼	1 0½	0 11¾	1 3
April ...	1 5¾	1 7¾	1 8½	1 5	1 2½	1 1	0 11	0 9½	0 11	1 0	1 0½	1 3
May ...	1 5	1 6½	1 7	1 3½	1 1½	1 0¾	0 10½	0 9¼	0 10½	0 11¾	1 0	1 3
June ...	1 3¾	1 5	1 4¾	1 2¾	0 11¼	0 11½	0 9½	0 9¼	0 10¼	0 11½	0 11¾	1 2½
July ...	1 3½	1 3¾	1 4¼	1 2¼	0 11¼	0 11¼	0 9¼	0 9	0 9¾	0 10¾	0 11¾	1 2¼
August ...	1 3¾	1 4	1 4¼	1 2¼	0 11¼	0 11	0 9¼	0 9	0 9¾	0 11	1 0½	1 2¼
September ...	1 4½	1 4¾	1 5	1 2¼	0 11¼	0 11¼	0 10	0 9	0 10¼	0 11¼	1 0¾	1 2¼
October ...	1 5½	1 5¼	1 5½	1 2	0 11½	0 11¼	0 10½	0 9¼	0 11¾	0 11½	1 0¾	1 1¼
November ...	1 5¾	1 5¼	1 5½	1 2	0 11¾	0 11¼	0 10½	0 9½	1 1⅛	0 11¾	1 4	1 1¼
December ...	1 6¼	1 6¾	1 6½	1 2	1 0¼	0 11½	0 10	0 9½	1 1⅜	0 11¾	1 4½	1 1¾
Calendar Year	1 5	1 5½	1 6	1 3½	1 0½	0 11¾	0 10½	0 9½	0 11	0 11½	1 0¾	1 2¼
	1 5½											

Wool.

(per Pound).

Month	1927	1928	1929	1930	1931	1932	1933	1934	1935	1936	1937	1938
	s. *d.*	*s.* *d.*	*s.* *d.*	*s.* *d.*	*s.* *d.*	*s.* *d.*	*s.* *d.*	*s.* *d.*	*s.* *d.*	*s.* *d.*	*s.* *d.*	*s.* *d.*
January ...	0 9¾	—	0 10½	—	—	0 3¾	0 2¼	—	0 4½	0 4¾	0 8½	0 8½
February ...	0 10	1 0	0 10½	—	—	0 3¾	—	—	—	0 4¾	0 9½	0 7
March ...	0 9¾	0 11½	1 0	—	—	0 3½	—	—	0 4¼	0 4¾	0 10¼	0 6¾
April ...	0 10	0 11½	1 0	—	—	—	—	—	0 4½	—	0 11	0 6¾
May ...	0 10½	0 11¾	0 11¾	0 7	0 4¾	—	—	0 5	0 4¾	0 5½	0 11½	0 6
June ...	0 10	0 11¼	0 11¼	0 6	0 4	0 2¼	0 3	0 4½	0 4½	0 6¼	1 0¼	0 4¾
July ...	0 10½	1 0¼	0 10¾	0 5½	0 3½	0 2	0 3½	0 4¼	0 4½	0 6¼	1 0	0 5
August ...	0 10½	0 11¼	0 10½	0 5	0 3½	0 2	0 4	0 4¼	0 4½	0 6½	1 0¼	0 5¾
September ...	0 10	0 11	0 10¼	0 4½	0 3¾	0 2	0 4	0 4½	0 4½	0 6½	1 0¼	0 5¾
October ...	0 10	0 9¾	0 10	0 4½	0 3½	0 2½	0 4	0 4½	0 4¾	0 6½	0 10½	0 6
November ...	—	0 9¾	0 9¼	—	0 3¾	0 2¾	0 4	0 4½	0 4¾	0 7½	0 9¾	0 6¼
December ...	0 10¾	0 10½	—	—	0 3¾	0 2¾	0 3¾	0 4½	0 4¾	0 7¾	0 8½	0 6¼
Calendar Year	0 10½	0 11¾	0 10¾	0 5½	0 3½	0 2¼	0 3½	0 4½	0 4½	0 6¼	1 0	0 5½
	0 11											

APPENDIX I.

NOTE ON THE EFFECT OF MARKETING SCHEMES ON PRICE QUOTATIONS.

Pigs.—Up to the end of 1934 the index is based on the average of the prices returned from nine markets where pork is sold. Regulations made under the Pigs Marketing Scheme in 1934, however, required bacon curers in Northern Ireland to send returns to the Ministry of the number of pigs purchased by them and the prices paid to producers. Thus from the beginning of 1935 prices for live and dead pigs have been based on these curers' returns. As from April, 1935, separate prices were fixed for pigs sold for Wiltshire cure, and pigs sold for cure into rolled bacon and ham, and in order to get an average of bacon pig prices Wiltshire and roll and ham prices have been weighted according to the quantities sold for these different kinds of cure.

Milk.—The bulk of the output of milk is sold in Northern Ireland to creameries for the manufacture of butter and cream, and since 1923 the Ministry has received returns from the creameries of the prices paid by them to producers and the quantity of milk received. Under the Marketing of Dairy Produce Act of 1929 these returns, which had previously been on a voluntary basis, were made compulsory.

The task of obtaining data for the construction of an index number for liquid milk has proved difficult, and up to the present no index number for liquid milk has been published by the Ministry. Prior to the introduction of the Milk Scheme the Ministry received no regular information regarding liquid milk prices, and from 1926 to 1934, therefore, it has been found necessary to use prices which relate to a limited field. These have been kindly supplied by the Belfast Co-operative Society and the Ulster Farmers' Union. Following the introduction of the Milk and Milk Products Act, of course, prices have been fixed by the Joint Milk Council, and the index has been constructed on the basis of a weighted average price for Grades A, B and C milk, after deductions have been made in respect of licence fees.

Cattle.—The index for store cattle and fat cows is based on the prices returned to the Ministry by the fair reporters. Fat cattle prices on the other hand have been returned since January, 1922, from the Belfast Auction Marts, through which a considerable proportion of the fat cattle sold in Northern Ireland pass. Accordingly, the fat cattle index is based on these Auction Mart prices up to the beginning of 1938. From September, 1934, fresh figures regarding the price of fat cattle were provided in connection with the operations of the beef subsidy. Since the average of these prices covers the whole of the fat cattle trade in the Province, the Ministry has decided to use these prices as from January, 1938. At that date the average of Auction Mart prices and beef subsidy prices practically coincided. Thus it was possible to make the change without a break in continuity.

Eggs.—Up to January, 1938, the egg index is based on the returns from markets and stores. From then onwards the prices fixed by the Ministry under the Marketing of Eggs Act, 1936, have been used and weighted from month to month by the quantities shipped to Great Britain.

APPENDIX II.

NOTE ON THE METHOD OF CALCULATING THE INDEX OF SEASONAL VARIATION.

It has already been explained that two monthly indices have been prepared, one showing the actual movement in monthly prices and the other showing the movement in monthly prices after seasonal fluctuations have been removed. The way in which these seasonal fluctuations have been removed can best be explained by taking egg prices as an example.

Broadly speaking, the method assumes that seasonal influences affecting the price of a product at any date in the year can be measured roughly by taking the actual price at that date as a percentage of the average price over the twelve monthly period of which that date is the centre. For each separate date there will of course be a separate yearly period: the end of the month of June is the centre of the calendar year; the end of the month of July is the centre of the year commencing in the preceding February and ending in the following January, and so on. In the table attached to this Appendix, i.e., Appendix II (a), the calculations commence with the calendar year 1928; this is followed by the year February, 1928, to January, 1929, and so on throughout a period of ten successive calendar years. But before these annual averages can be compared with the actual monthly price figures a further step is necessary, since the centre of the annual periods falls, as already mentioned at the end of a month, whereas the monthly price figures themselves are averages for the whole of the month. To remove this difficulty the averages of two successive annual periods are themselves averaged, i.e., the average for the calendar year 1928, which is centred at the end of June, 1928; and that for the year February, 1928, to January, 1929, which is centred at the end of July, 1928, are themselves averaged to give a figure which can be regarded as relating to the month of July, 1928. This figure is then compared with the actual monthly price for July, 1928, the latter being expressed as a percentage of the former.

By continuing the process throughout the ten years, nine percentages are obtained for each month of the calendar, and the average of the nine (after elimination of any which are clearly abnormal) is taken as measuring the

seasonal variation for the month in question. The final step is to adjust the figures thus obtained for each of the twelve months so that their average equals 100. The resulting twelve percentages constitute the index of seasonal variation, and the "corrected" price index for a particular commodity is obtained by dividing its original price index by the appropriate index of seasonal variation for the month in question and multiplying the result by 100. This method can be illustrated by the following example:—

From Appendix II(a) the average price for the period January-December, 1928 = 14s. 6d. (1); and the average for the period February 1928-January 1929 = 14s. 0d. (2).

Then the average price for the middle of July is the average of (1) and (2) = 14s. 6d. + 14s. 0d. = 14s. 3d., as shown for July, 1928, in Appendix II(b)

The figure for July, 1928, shown in Appendix II(c) is the price for July in Appendix II(a), expressed as a percentage of the figure for July in Appendix II(b), viz:—

$$\frac{\text{10s. 0d.} \times 100}{\text{14s. 3d.}} = 69.92.$$

The figures in Col. 12 of Appendix II(c) form the index of seasonal variation which is applied as follows:—

The ordinary uncorrected index number for July, 1938, is 95: then the index number adjusted for seasonal variation is

$$\frac{95 \times 100}{82.94} = 115.$$

In order to keep the index of seasonal variation up to date it is proposed each year to incorporate calculations in respect of the latest completed year, and to omit those relating to the first of the preceding ten years; i.e., to base the index on a moving period representing the latest ten years for which the calculation can be made. In this way account will be taken of any changes which may occur in the character of the seasonal variations affecting prices.

APPENDIX II. (a).

Actual Average Monthly Prices of N.I. Eggs per 120.

	1928		1929		1930		1931		1932		1933		1934		1935		1936		1937	
	s.	d.	s.	d.	s.	d.	s.	d.	s.	d.	s.	d.	s.	d.	s.	d.	s.	d.	s.	d.
January	20	9	14	11	15	10	12	11	12	2	10	7	10	7	10	7	11	11	10	3
February	13	10	13	9	12	7	10	9	9	4	10	5	9	2	9	10	10	6	11	1
March	8	4	11	7	7	10	7	9	7	0	6	9	5	9	6	5	6	11	8	3
April	8	5	8	8	8	6	6	9	6	8	5	10	6	4	6	5	6	6	7	2
May	9	3	10	2	8	0	7	2	6	6	6	6	6	1	6	9	7	8	6	11
June	9	7	9	7	8	10	6	11	7	7	7	4	7	6	8	1	8	3	8	7
July	10	0	12	11	11	8	10	0	9	10	8	5	8	0	7	11	9	10	11	9
August	13	6	15	4	13	0	11	1	10	1	10	6	10	11	11	4	12	5	12	5
September	15	1	15	8	13	5	12	2	13	5	12	2	10	7	12	7	12	11	15	0
October	17	11	21	8	19	9	15	7	15	4	14	8	14	3	15	1	18	3	16	9
November	24	0	24	5	21	1	21	3	18	6	18	4	17	0	17	9	17	2	19	9
December	23	3	23	5	16	9	14	2	14	2	13	5	13	0	16	0	15	0	18	4

APPENDIX II. (b).

Two Monthly Averages of 12-monthly Moving Averages of Prices of N.I. Eggs centred on the 7th month.

Month	1928	1929	1930	1931	1932	1933	1934	1935	1936	1937
	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.
January	—	14 6	14 6	12 3	11 1	10 8	10 3	10 2	11 1	11 7
February	—	14 8	14 5	12 1	11 1	10 8	10 3	10 2	11 3	11 8
March	—	14 10	14 2	12 0	11 1	10 7	10 2	10 3	11 4	11 9
April	—	15 0	14 0	11 9	11 1	10 6	10 1	10 5	11 5	11 9
May	—	15 2	13 10	11 7	11 0	10 6	10 0	10 5	11 7	11 10
June	—	15 2	13 5	11 6	10 11	10 5	9 11	10 7	11 6	12 0
July	14 3	15 3	13 0	11 4	10 10	10 5	9 11	10 9	11 4	—
August	14 0	15 3	12 9	11 3	10 10	10 4	9 11	10 10	11 4	—
September	14 2	15 0	12 9	11 2	10 10	10 3	10 0	10 11	11 5	—
October	14 3	14 10	12 8	11 1	10 9	10 3	10 0	10 11	11 6	—
November	14 4	14 9	12 6	11 1	10 9	10 3	10 1	11 0	11 6	—
December	14 5	14 7	12 5	11 1	10 9	10 3	10 1	11 0	11 6	—

APPENDIX II. (c).

(1) Actual Average Egg Prices expressed as Percentages of Moving Averages.
(2) Seasonal Indices obtained from Percentages.

Month	1928	1929	1930	1931	1932	1933	1934	1935	1936	1937	Seasonal Indices	
											Averages 1928-37 (Cols. (1) to (9) or (2) to (10).)	Figures in Col. (11) adjusted to average 100
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
January	—	103.03	109.08	105.63	109.71	99.53	103.42	104.44	107.47	88.41	103.41	103.61
February ...	—	93.33	87.21	88.76	84.55	98.21	89.54	96.75	93.42	95.53	91.92	92.10
March	—	78.51	55.42	64.49	63.27	63.49	56.93	62.83	61.24	70.65	64.09	64.22
April	—	58.01	60.66	57.53	59.80	55.42	62.74	61.66	56.82	60.85	59.28	59.40
May	—	67.33	57.86	61.83	59.36	61.58	60.54	64.56	66.41	58.39	61.98	62.10
June	—	63.09	66.24	59.93	69.88	70.05	75.05	76.13	71.71	71.10	69.24	69.38
July	69.92	84.82	89.77	87.91	90.67	81.17	80.44	73.47	86.81	—	82.78	82.94
August	96.43	100.92	101.72	98.67	93.24	101.74	110.05	104.14	109.62	—	101.84	102.04
September ...	106.51	104.53	105.59	109.05	123.62	118.60	105.50	115.67	113.15	—	111.36	111.58
October	125.61	145.89	156.33	140.11	142.08	143.22	141.67	137.84	158.57	—	143.48	143.76
November ...	167.57	165.81	168.24	191.43	172.28	179.12	168.69	161.29	149.26	—	169.30	169.64
December ...	161.68	160.05	135.13	127.39	131.94	130.66	128.26	144.88	130.69	—	138.96	139.23
Average	—	—	—	—	—	—	—	—	—	—	99.80	100.00

APPENDIX III.

PRODUCTS FOR WHICH INDICES HAVE BEEN PREPARED.

1. Livestock and Livestock Products †

- Cattle
  - Fat Cattle *
  - Store Cattle
  - Fat Cows
- Fat Sheep
- Bacon Pigs
- Poultry
  - Hens and Chickens
  - Ducks
  - Turkeys
- Eggs
- Milk
  - Milk : for Manufacture *
  - Milk : Whole
  - All Milk *
- Farmers' Butter
- Wool

2. Crops.

- Wheat *
- Potatoes
- Oats *
- Hay
- Oat Straw
- Flax
- Grass Seed
  - Perennial
  - Italian
  - Mixed
  - All Grass Seed

† Indices for these products are published in the above tables (exclusive of all milk).

* Products, indices of which have been calculated separately on prices (a) including, and (b) excluding Government payments.

MARKETING SCHEMES.

AGRICULTURAL MARKETING (PIG INDUSTRY) ACT (N.I.) 1934.

PIG PRICES FOR FEBRUARY, 1939.

The following announcement has been made by the Pig Industry Council for Northern Ireland.

PRICES FOR DEAD PIGS.

The prices per dead cwt. for dead pigs sold by producers to curers in Northern Ireland in February, 1939, are as follows :—

Weight Class. (Dead Weight)	Grade 1.	Grade 2.	Grade 3.	U.L. or U.F.	Partly Black Pigs.
c.1.0.21 to c.1.1.13	64/-	61/-	58/-	54/-	
c.1.1.14 to c.1.2.3	68/-	65/-	62/-	58/-	5/- below relevant Grade Price.
Weight Class. (dead Weight)	Grade A	Grade B	Grade C	U.L. or U.F.	
c.1.2.4 to c.1.2.14	68/-	65/-	62/-	59/-	
c.1.2.15 to c.1.3.14	68/-	65/-	62/-	59/-	
c.1.3.15 to c.2.0.0	65/-	62/-	59/-	56/-	
c.2.0.1 to c.2.0.14	59/-	56/-	53/-	50/-	

Pig Carcases c.1.0.0 to c.1.0.20—61/-

(*N.B. These prices are the same as those fixed for January*, 1939).

Authorised cuts :—

(a) Broken ham (dry, shank and/or shell bone break)—5% of the gross value of the carcase.

(b) Broken ham (wet break)—12½% of the gross value of the carcase.

(c) Shoulder-stuck carcase—3/- per shoulder affected.

The gross value of a carcase is the product of the dead weight and the relevant grade or other price per cwt.

When portion of a pig carcase is condemned on account of disease the existence of which could not reasonably have been known to the producer before despatch to the curer, the appropriate grade price (or fixed price if the carcase weighs not less than 1 cwt. 0 qr. 0 lb. and not more than 1 cwt. 0 qr. 20 lb.) shall apply. If the carcase is wholly condemned on account of disease

the existence of which could not reasonably have been known to the producer before despatch to the curer the relevant Grade 2 or Grade B price (or fixed price if the carcase weighs not less than 1 cwt. 0 qr. 0 lb. and not more than 1 cwt. 0 qr. 20 lb.) shall apply.

The foregoing prices do not apply in the case of (a) wholly black pigs, boars, rigs or stags, sucked sows, and pig carcases weighing under c.1.0.0 or over c.2.0.14 and (b) pigs visibly diagnosable as diseased before despatch by the producer and subsequently condemned; emaciated or screw pigs; smelling pig carcases with definite indications of putrefaction and pig carcases badly abused or damaged before heing handed over by the producer to the curer.

Prices for Pigs Sold Alive on Direct Contract to Wiltshire Curers in Northern Ireland, and for Pigs Sold Alive to the Pigs Marketing Board (Northern Ireland) and Resold to Wiltshire Curers in Northern Ireland.

In the case of pigs sold alive to Wiltshire curers under direct contract, or sold to the Pigs Marketing Board and resold to Wilshire Curers, the prices per dead cwt. during February, 1939, are as follows:—

Weight Class (Dead Weight)	Grade 1.	Grade 2.	Grade 3.	U.L. or U.F.	Unsuitable.
c.1.0.21 to c.1.1.13	74/–	71/–	68/–	64/–	61/–
c.1.1.14 to c.1.2.3	74/–	71/–	68/–	64/–	61/–
	Grade A.	Grade B.	Grade C.	U.L. or U.F.	
c.1.2.4 to c.1.2.7	71/–	68/–	65/–	62/–	
c.1.0.0 to c.1.0.20	Suitable 63/–		Unsuitable 61/–		
Over c.1.2.7	On the same basis as pigs sold dead.				

(*N.B. These prices are the same as those for January,* 1939).

Prices for Pigs Sold Alive to the Pigs Marketing Board (Northern Ireland) and Not Resold to Wiltshire Curers in Northern Ireland.

In the case of pigs sold alive to the Pigs Marketing Board during February, 1939, and not resold to Wiltshire curers, the prices per live cwt., according to grade, are as follows:—

Live Weight.	Grade 1.	Grade 2.	Grade 3.		Unsuitable.
c.1.1.14 to c.1.2.13	47/3	47/3	47/3		45/9
c.1.2.14 to c.2.0.0	55/6	53/3	51/-	U.L. or U.F. 48/–	45/9
c.2.0.1 to c.2.1.14	48/–	45/9	43/6		41/3
c.2.1.15 to c.2.2.7	45/9	43/6	41/3		39/–
c.2.2.8 to c.2.2.21	41/3	39/–	36/9		34/6

(*N.B. These prices are the same as those for January,* 1939).

These prices do not apply to live pigs under c.1.1.14 or over c.2.2.21, live pigs intended for breeding, live boars, live sucked sows, rigs or stags, injured or diseased pigs, live in-pig gilts, or live pigs sold (on contract, registered with the Pig Industry Council) to curers in Northern Ireland. All other live pigs inside the weights c.1.2.0 to c.2.2.21 can be sold only to the Board.

Authorised Deductions.

Every pig (dead or alive) sold to a curer or to the Pigs Marketing Board is subject to a levy at present amounting to 5/-.

In addition to this amount, a deduction of 4d. per pig may be made in the case of sales to curers or to the Board (on pigs resold to curers in Northern Ireland) to cover insurance, so that the producer will not suffer financial loss if the carcase is condemned as unfit for human consumption.

GRADING STATISTICS.

Table showing the percentages of pig carcases falling within the weight and grade classes indicated during November, 1938.

Under c.1.0.21		c.1.0.21 to c.1.1.13					c.1.1.14 to c.1.2.3.					Totals
Suitable	Un-suitable	Grade 1	Grade 2	Grade 3	U.L. & U.F.	U.	Grade 1	Grade 2	Grade 3	U.L. & U.F.	U.	
.66	.09	1.45	.77	.23	.14	.02	3.50	3.48	1.38	.63	.02	12.37

Grade A.				Grade B.				Grade C.				
1	2	3	4	1	2	3	4	1	2	3	4	
6.98	23.30	5.28	1.24	4.76	21.36	6.93	2.19	1.47	7.82	1.65	.51	83.49

Ungraded Carcases.						
Under Grade A measurements. U.L.	Over Grade C measurements U.F.	Wholly condemned U1.	Wholly black, injured or damaged U2.	Overweights, boars, sows, etc. X.	Partly Black Y.	
.06	2.13	.03	.54	1.37	.01	4.14
					Total	100%

These figures have been calculated from the purchase and grading statements which the curers furnish to the Ministry.

The volume of trade in pig carcases was considerably reduced last month. With the reduction in the fixed price the average realised price per cwt. fell by 10d. to £3 4s. 4d. per cwt. The average weight, however, was 4 lbs. heavier at c.1.2.26, and the average value per carcase advanced by 10d. to £5 11s. 6d.

The following table gives the percentage results of an analysis of the purchase and grading statements furnished by Wiltshire Bacon Curers in respect of live pigs delivered on direct contract by producers during the month of December, 1938.

Weight Class.	Grade 1.	Grade 2.	Grade 3.	Unsuitable U.L. or U.F.	Total
Under c.1.0.0					—
c.1.0.0 to c.1.0.20					.52
c.1.0.21 to c.1.2.3	50.45	28.38	7.28	2.58	88.69
	Grade A.	Grade B.	Grade C.		
c.1.2.4 to c.1.2.7	1.82	1.50	.77		4.09
c.1.2.8 to c.1.3.14	3.16	2.27	.93	.24	6.60
Over c.1.3.14.		.04	.03	.03	.10
				Total	100.00

The average net price per cwt. in respect of these deliveries works out at £3 9s. 4d., after making allowance for insurance and contribution to the Pigs Marketing Board.

The average weight works out at c.1.1.20, the net average price per pig being £4 18s. 11d.

COST OF STANDARD PIG RATION.

The average retail cash price per cwt. of the standard ration for the sixteen weeks' period ended 21st January, 1939, was 8/9¼d. The average price for

the similar period ended 24th December, was 8/9¾d. These figures have been calculated by the Ministry from returns collected from ten representative centres in Northern Ireland.

The following is the ration upon which the feeding cost is based:—

Maize Meal	30%
Barley Meal	30%
White Pollards	20%
White Bran	10%
Meat Meal (60% Protein) ...	10%

THE CATTLE INDUSTRY (EMERGENCY PROVISIONS ACTS, 1934 AND 1935 AND THE LIVESTOCK INDUSTRY ACT, 1937.

The following is a summary made under these Acts up to and including 4th February, 1939.

Live Weight	*Number of Animals*	*Total amount paid* £ s. d.
England and Wales	4,849,403	11,934,076 7 1
Scotland	1,477,117	3,867,612 10 6
Northern Ireland	503,335	1,071,284 12 2
Total (United Kingdom)	6,829,855	16,872,973 9 9
Dead Weight		
England and Wales	148,674	372,827 5 0
Scotland	45,878	133,474 0 10
Total (Great Britain)	194,552	506,301 5 10

NUMBERS OF FAT CATTLE CERTIFIED FOR SUBSIDY.

The numbers of fat cattle certified for payment of subsidy as published in respect of the Livestock Commission, December, 1938, are shown hereunder:

	December, 1938					Corresponding totals in	
	Home-bred		Imported		Total	Dec., 1937	Dec., 1936
	Ordinary Grade	Quality Grade	Ordinary Grade	Quality Grade			
England ...	18,516	39,775	5,059	16,388	79,738	78,838	93,179
Wales ...	2,730	4,853	72	441	8,096	7,537	9,627
Scotland ...	2,061	15,978	724	8,519	27,282	27,855	30,390
Northern Ireland	4,687	2,032	542	361	7,622	7,144	9,148
United Kingdom	27,994	62,638	6,397	25,709	122,738	121,374	142,344

As the great majority of fat stock markets are held on the early days of the week the rate of marketing of fat cattle cannot be judged accurately from the number of animals marketed in a calendar month. For comparative purposes appropriate weights are applied by the Livestock Commission to each day of the week, and the figures for each calendar month are adjusted accordingly, so as to allow as far as possible for the fact that a large number of markets are held on Mondays, and that the number of markets held decreases day by day as the week proceeds. The adjusted figures for December, 1938, 1937 and 1936, are 126,297, 121,943 and 137,238 respectively.

The average prices per live cwt. of certified cattle in December, 1938, were:

	December, 1938			Corresponding Averages in	
	Ordinary Grade	Quality Grade	Average	December, 1937	December, 1936
	s. d.	s. d.	s. d.	s. d.	s. d.
England and Wales ...	34 7	39 1	37 9	41 8	34 6
Scotland	37 6	41 10	41 4	44 4	38 5
Northern Ireland ...	33 0	34 4	33 4	37 1	30 1
United Kingdom ...	34 7	39 8	38 2	42 0	35 0

WHEAT ACT, 1932.

ADVANCE PAYMENT OF £2,150,000 TO REGISTERED GROWERS.

On the 31st January the Wheat Commission sent cheques to 61,600 registered growers in payment of an advance on account of deficiency payments for the cereal year ending 31st July, 1939. In 550 other cases where it had not been practicable to make payment on the 31st January, cheques will be despatched as soon as possible.

On valid wheat certificates delivered between the 28th October and 31st December payment was made at the rate of 4/- per hundredweight (18/- per quarter of 504 lbs.). In the case of valid wheat certificates delivered between the 1st August and 28th October on which an advance payment has been made at the rate of 3/- per hundredweight (13/6d. per quarter), payment was at the rate of 1/- per hundredweight (4/6d. per quarter), in order to put those certificates on the same footing as certificates delivered since the 28th October.

The aggregate amount of the present advance is approximately £2,150,000 and, with the previous payment made in November, brings the total sum

advanced on account of deficiency payments for the current cereal year to approximately £3,472,000. This sum covers 100,575 wheat certificates, vouching for a total quantity of 17,359,600 hundredweights (3,857,700 quarters) of wheat.

The question of making advance payments to growers in respect of wheat certificates delivered after the 31st December, 1938, will be considered by the Commission in due course.

AGRICULTURAL MARKETING ACTS (N.I.) 1933 and 1934.

BUTTER AND CREAM MARKETING SCHEME (N.I.), 1936.

The following persons have been nominated as candidates for election to the Butter and Cream Marketing Board (Northern Ireland) in accordance with Paragraph 24 of the Butter and Cream Marketing Scheme (Northern Ireland), 1936—

(a) by registered producers the management of whose premises and business is controlled by their milk suppliers through an elected Committee of Management:—

(1) Alexander McLean Buller, Esq., Cloughmills Co-operative Agricultural and Dairy Society, Limited, Cloughmills, County Antrim;

(2) James Carson, Esq., Omagh Co-operative Agricultural and Dairy Society, Limited, Omagh, County Tyrone;

(3) James Fulton Gamble, Esq., M.P., Bridgehill, Castlederg, County Tyrone;

(b) by registered producers who privately own or occupy premises at which butter or cream is produced—

(1) Thomas Dobson, Esq., 197/203 Beersbridge Road, Belfast;

(2) William McAdam, Esq., Thistle Bank House, Enniskillen, County Fermanagh.

Two members are to be elected to the Board by registered producers the management of whose premises and business is controlled by their milk suppliers through an elected Committee of Management, and one by registered producers who privately own or occupy premises at which butter or cream is produced.

A candidate may withdraw his candidature by sending to the Secretary, Ministry of Agriculture, Stormont, Belfast, by registered post, not later than the 25th February, a notice in writing of such withdrawal signed by him.

Provided that an election is to be held, voting papers will be sent by post, not later than the 10th March, 1939, to every producer whose name appeared on the Register of Producers at 1st February, 1939, and, in order to count in the election, must be returned on or before 20th March, 1939.

AGRICULTURAL NOTES.

SEASONAL FARM NOTES.

Supplies of Manures.—Farmers should now order the supplies of artificial manures likely to be required during the coming sowing season, so as to avoid a last minute rush and a possible delay at sowing and planting time through not having supplies at hand when they are required. Besides, when the order for the full supply is given early in the year, instead of for small lots as required, it is likely that more satisfactory terms can be obtained.

Provided that the manures are stored in a dry shed there is little risk of loss or wastage of fertilising properties during storage. In the case of mixed manures such as the standard mixture for potatoes, it has been shown conclusively that the components can be mixed for several weeks before application without impairing the efficiency of the mixture. Therefore, farmers are advised to mix the manures and have the mixture ready by the time the potato planting is being done.

To assist farmers in estimating the quantities of artificial manures required, suitable mixtures of manures for various crops and the quantities of each required per acre are given on page 613 of this report.

Seed Oats.—In cases where the oat crop was exposed to bad weather last autumn, to such an extent as to impair the germinating capacity of the seed, it will be necessary to obtain supplies of seed from crops which were well saved. Extra care will be necessary this year to ensure that the seed is of good quality. Potato oats can be depended upon to give fairly good yields, but farmers having rich soil on their farms will likely obtain heavier yields from varieties such as Crown, Stormont Arrow, or Victory. If difficulty is experienced regarding supplies, or a doubt exists as to the most suitable variety to grow in a particular case, the Agricultural Instructor for the district should be consulted, as he may be able to suggest probable sources of supply of a variety which he considers most suitable. The results of the oat variety tests carried out by the Agricultural Instructors are given on page 618.

Prevention of Lodging in Oat Crop.—Where lodging of the crop is feared, as in the case of oats grown on wild white clover lea, no nitrogenous manure (sulphate of ammonia, nitro chalk, or nitrate of soda) should be applied—but only a dressing of a mixture of superphosphate and potash salts to balance the store of nitrogen in the soil. Early sowing—during the month of March—will also aid in preventing lodging. Oat crops attacked by certain diseases, such as leaf stripe, are also prone to lodge or get tangled. To prevent that disease the seed should be dusted with one of the organic mercury compounds, such as Ceresan, Agrosan or Abavit, before sowing.

Seed Potatoes.—It is possible that potatoes intended for seed for next season's crop have suffered injury from the frost, and an inspection of stocks both in boxes and in store should be made at once, and new supplies obtained if necessary. There is a good supply of pure and healthy stocks of most varieties still available at reasonable rates, and farmers should secure seed from such stocks if those on the farm require renewal because of frost damage, or if they have become deteriorated by leaf roll or mosaic diseases. Lists giving the names and addresses of growers of certified stocks of potatoes may be obtained from the Ministry, free, on request. To assist growers in making a choice of varieties, the results of the variety tests carried out in 1938 are given on page 615.

Barley Growing.—The results of the barley variety tests carried out by the Agricultural Instructors last season are given on page 621. These results indicate that reasonably good crops of barley can be grown in Northern Ireland and, in view of the value of barley for pig-feeding, farmers not already growing some barley should arrange to do so during the coming season. There is no other food which is quite so suitable as barley for the production of pig carcases of good quality. Barley cannot, however, be grown successfully on soil which requires lime, and it is necessary, in order to obtain a good crop of barley from such land, to apply to it a dressing of from 1 to 1½ tons of burnt lime per acre a few weeks before the barley is to be sown. The Land Fertility Scheme, by providing facilities for obtaining supplies of lime at half-price, is of particular value to the barley grower and pig feeder.

Spring Wheat.—It is now too late to sow autumn varieties of wheat, and those intending to sow wheat this season will have to use a spring variety, such as Red Fife or Red Marvel. The great difficulty with spring wheats is to get enough dry sunny weather to harvest the crop, as ripening will usually be later than in the case of winter varieties, especially if sowing is not done during February or early March. When buying spring wheat for sowing, only samples which are guaranteed to be of a reliable spring variety should be accepted.

The results of the winter wheat variety tests carried out by the Agricultural Instructors during 1938 are given on page 623 of this issue of the report.

Liming.—There have been very few opportunities for carting and spreading lime during the past few months, but every effort should be made during the next month to apply lime to a portion of the farm. The best place in the rotation to apply lime is after the potato and root crop, and before the field is sown out to grass. The land should be ploughed and the lime applied on top of the ploughed ground, so as to have it within the reach of the roots of the plants of the succeeding crop. The lime should be applied a few weeks before the seeds are sown, if burnt lime is being used.

It is a bad practice to apply lime to land in which potatoes are to be planted, as lime encourages the development of scabby skins on the tubers, and may also reduce the yield. Apart from potatoes, crops grown on soil which is deficient in lime will not respond fully to manuring. The grasses and clovers grown on well-limed ground are much more valuable in the production of strong-boned, healthy animals than those grown on soils which are in need of lime. The practice of liming may, therefore, be regarded as a means of increasing the nutritive value of pasture, particularly in respect of bone-forming qualities.

Early Grass.—If early grass is desired an application of a nitrogenous manure such as sulphate of ammonia or nitro-chalk at the rate of 1 cwt. per acre should be made to a field of pasture which received a dressing of a phosphatic manure last autumn. Further information regarding the manuring of pastures, and also of hay, is given on page 615 of this report.

SEASONAL LIVESTOCK NOTES.

Ox Warble Fly.—In accordance with the Ox Warble Fly Order cattle owners are required to dress all cattle infested with the maggots of the warble fly with an approved derris root preparation between the 15th and 22nd March, and subsequently at intervals of 28 days until no further maggots appear.

Farmers are advised to consult the Agricultural Organiser, Instructor or Overseer for the County or district with regard to the most suitable brand of derris root preparation to use. Supplies of material should be obtained in good time so that there will be no delay when the time for application arrives. The success of the Order depends on killing all the maggots in the cattle, for if even a few escape there is the possibility that they will give rise to warble flies, which will perpetuate the pest during the succeeding season.

If all cattle owners would treat their cattle thoroughly and, in accordance with the Order for a few years, the pest would be exterminated and the necessity for compulsory dressing would then disappear. It is hoped that this aspect of the matter will be kept in view, and that all owners of cattle will co-operate whole-heartedly in ridding the country of the pest. Particulars regarding the conditions to be complied with under the Order, together with the names of the brands of preparations recommended, are given in Circular No. 13, while full information relating to the preparation and application of washes is given in Leaflet No. 64.

Sheep.—Special attention will require to be given to the breeding flock during the next few months. The ewes near lambing should be moved into a well-sheltered field which is convenient to the farm buildings, so that they can be seen frequently. Except during spells of very severe weather, the sheep should be permitted to lamb outside.

Sheep which have become over fat and lazy are often affected with pregnancy toxaemia. If this disease is feared it would be advisable to make the sheep take a moderate amount of exercise by driving them round the field daily.

Great care should be taken with in-lamb ewes if they are being treated for liver fluke disease. It is not recommended that sheep should be dosed within one month of the date on which they are due to lamb.

Pigs.—On dry, mild days, sows and litters should be allowed out for a run over clean pasture. This will make the young pigs healthier and more vigorous and encourage a better thrive.

SEASONAL GARDEN AND ORCHARD NOTES.

Spraying Apple Trees.—The spraying of apple trees with tar-oil washes should be pushed on whenever the weather is suitable, as this work should be completed before the end of February.

Manuring Apple Orchards.—Orchards which require nitrogenous manure should get a dressing of sulphate of ammonia now. Generally speaking, trees which made less than nine inches of growth last year, and those on which the bark is of a reddish brown colour, may be regarded as needing nitrogen. The amount of sulphate of ammonia to be given will vary according to the variety and age of the tree, but from 1 to 1½ lb. scattered over the ground underneath the spread of each tree is an average dressing. A dressing of sulphate of potash should also be applied now (if this has not been done already) at the rate of 4 cwt. per acre.

Planting Strawberries.—Strawberry runners may be planted as soon as the ground can be got into a suitable condition. Any blanks in the plantations established last autumn should be made up, and all plants which were loosened in the soil by the frost made firm. Runners planted in the spring should not be allowed to bear fruit in the year of planting. This can be ensured by removing the flowers as they appear.

Cabbage and Lettuce.—Cabbage and lettuce plants which have wintered in the seed bed, and cauliflowers which have wintered in a cold frame, may be planted out as soon as the soil can be got ready. A warm, sheltered border should be selected for them if possible. Cabbage planted out last autumn should be dressed with nitrate of soda at the rate of 3 cwt. per acre.

Potatoes.—On warm soils and in sheltered positions, early varieties of potatoes can be planted now. The stock of "seed" of the later varieties should be examined and the tubers brought into the light so as to toughen the buds.

Other Vegetables.—Broad beans and early peas may now be sown in sheltered positions out of doors; and early in March, if the weather and soil conditions are suitable, a sowing of onions, parsnips, brussels sprouts, cabbage, lettuce and cauliflower may be made out of doors. Particulars of vegetable growing are given in Leaflet No. 67.

Rhubarb.—New plantations of rhubarb should be made now. This plant requires a deeply dug and well manured soil. Old crowns can be divided by means of a sharp spade, and each piece having two or three good buds used for the new plantation. When planting is correctly done, the crowns should be just below the surface of the soil.

Flowers.—Stocks of dahlia and begonia tubers should be examined and any decaying ones removed. The sound tubers should be placed in boxes of moist soil, and the boxes placed in a greenhouse or cold frame. Seeds of half-hardy annuals such as lobelia, golden feather, etc., should be sown in boxes, and these placed in a frame over a mild hot-bed.

General.—All manuring and digging of vegetable ground should be completed as soon as possible. All ditches should be cleaned and the openings of drains examined to see that all drains are acting properly.

Bee-keeping.—Bee-keepers should examine their stocks on the first suitable occasion, and ascertain what quantity of stores remains. Towards the end of February stimulative feeding may begin. This consists of giving each stock daily a small quantity of syrup made by dissolving 3 lb. of good white sugar in 1 quart of water. The syrup should be given warm, and late in the evening, and only sufficient for the bees' immediate use. Should there be any of it stored by the bees the quantity being supplied should be reduced.

SEASONAL POULTRY-KEEPING NOTES.

Rearing of Chickens.—Chicken rearing is one of the main considerations of the successful poultry keeper. Any set-back which chickens receive during the brooding stage will leave its mark on the birds for life, and, accordingly, every endeavour should be made to provide suitable accommodation for the birds, and otherwise to ensure that they have all other requirements for development and the maintenance of health. A proper brooder is an essential in the successful rearing of chickens. The brooder should be such as will generate sufficient warmth to prevent the chickens huddling together to get warm, even during the coldest weather; and it should at the same time permit of adequate fresh air reaching the birds.

Feeding of Chickens.—Suitable food mixtures for chickens can be prepared on the farm with very little trouble or extra cost. Chickens thrive very satisfactorily if the meal mixture is made into a mash by wetting it with separated

milk. The dry mash system of feeding has also been found satisfactory, but with such a system it is advisable to close the mash hopper for a couple of hours each day so that the birds are hungry for the next feed. Full particulars of meal mixtures suitable for chickens are given in Leaflet No. 20. Separated milk is the most valuable food of all for the rearing of chickens, and should be used where available.

Green Food.—If chickens are kept indoors during the first few weeks some green food should be provided for the birds when they are big enough to pick at such things as cabbage or kale leaves or turnip tops.

Cod Liver Oil.—It is necessary to include some cod liver oil in mashes for chickens, especially during the first few weeks, if they are being reared indoors. Only a reputable brand of cod liver oil, with a guaranteed content of Vitamin D, should be purchased. Half a pint of cod liver oil to 2 stones of mash is the proper quantity to add. An article on the purchase and use of cod liver oil was published in last month's report.

Sunlight.—Every effort should be made to permit young chickens to be exposed to direct sunlight which is of very great value in keeping the birds growing and in a healthy condition. The windows of the rearing house should be left open when the weather is fine.

Rearing Accommodation.—It is most important that there should be adequate accommodation for all chickens that are being reared. It is a great mistake to overcrowd poultry, and such a practice tends to increase the numbers of various pests and parasites and thus greatly to increase the risk of disease. The rearing of chickens in small flocks of from 50 to 80 birds is strongly recommended.

Separation of the Sexes.—Birds which are not required for laying or breeding should be fattened off as soon as possible, and to that end should get foods rich in starch. If, however, birds which are being kept for laying or breeding receive such food they will not develop properly, will get overfat and will not become sturdy adults. It is, therefore, necessary to separate the birds being kept for laying or breeding from those which are being fattened off. This entails separation of the sexes as soon as they can be distinguished, as in most cases all the pullets except the culls are kept for laying, and the cockerels, except those required for breeding, are fattened for table purposes.

Fresh Rearing Ground.—It has often been observed that where chickens are reared on the same ground year after year the results obtained get less satisfactory each year, due to the fact that various pests and parasites increase in numbers in the ground, and thus are capable of causing increased damage each year. To prevent this accumulation of "trouble-causing" organisms every effort should be made to procure fresh ground for the chickens each

season. Soil which has become foul can be refreshed and again made suitable for poultry by ploughing it up, taking a crop such as oats, and resowing the ground out to pasture.

Turkeys.—The turkeys which have been kept for breeding should receive more attention from now onwards, and the amount of food given increased. A good laying mash and grain mixture fed regularly to the birds will encourage early laying and will also aid in producing vigorous easily-reared chickens. Full particulars regarding the management of breeding turkeys and the rearing of young turkeys are given in Leaflet No. 37.

MANURIAL MIXTURES FOR FARM CROPS.

It should be remembered that during its period of growth a crop takes certain "foods" out of the soil in definite proportions, and that if any one of these "foods" is deficient in the soil no other food, however abundant, can take its place. In manuring crops, therefore, the aim must be to have full supplies of all the "foods" required by crops present in the proportions in which they are required. The "foods" which are most liable to be deficient in the soil are nitrogen, phosphorus, potash and calcium. All farm crops require these food constituents, but not in the same proportion. Various mixtures of artificial manures in accordance with the crops to be grown are added to the soil to supply the respective requirements of the crops of these "foods". From the results of numerous experiments carried out in Ireland over many years the manurial mixture which is most suitable and economical for each of the different crops has been ascertained. These mixtures are as follows :—

Oats.—For lea ground in poor condition :

1 cwt. sulphate of ammonia
2 cwt. superphosphate
1 cwt. 30 per cent. potash salts
} per statute acre

Where there was a good sward of wild white clover the sulphate of ammonia may be considerably reduced or dispensed with altogether, as otherwise the crop will be very liable to lodge. In such cases the superphosphate and the potash salts only should be applied, and will aid in preventing lodging of the crop. Either mixture can be applied some time before sowing, or at the time of sowing, the oats. If applied a few weeks before sowing the oats, the manure may have the effect of encouraging early ripening.

Wheat.—If the wheat crop is rather backward in spring an application of 1 cwt. per acre of a nitrogenous manure such as sulphate of ammonia, nitrochalk or nitrate of soda in April will aid in speeding up the growth of the crop. It is not advisable to apply the nitrogenous manure too early in spring as this may cause the crop to lodge before harvest.

Barley.—Soil which has not been limed for some time should receive a dressing of from 20 to 30 cwt. of burnt lime per acre before the barley crop is sown. If barley is grown on the same field in each rotation, and lime applied each time, then a dressing of about 15 cwt. of lime per acre will suffice.

Artificial manures are not usually required if barley is grown immediately after a root crop, but where it is grown after another cereal crop such as oats, the following manurial mixture should be applied at the rate of from 2 to 3 cwt. per statute acre:—

1 cwt. sulphate of ammonia,
3 cwt. superphosphate,
1 cwt. 30 per cent. potash salts.

Flax.—The chief manure required for flax is muriate of potash, and from 1 to 1½ cwt. per acre should be applied a few days before the flax seed is sown. If the soil is in poor condition ½ cwt. of sulphate of ammonia per acre may also be applied.

Potatoes.—Farmyard manure, if available, should be applied at the rate of from 15 to 20 tons per statute acre. In addition a mixture of artificial manures consisting of:—

1 cwt. sulphate of ammonia,
4 cwt. superphosphate,
1 cwt. muriate of potash,

should be applied to each statute acre. In cases where the farmyard manure consists of pig manure, or where from experience it is known that the above manurial mixture tends to produce long, rank tops it may be found advisable to reduce the proportion of sulphate of ammonia in the above mixture. Where early potatoes are grown for sale 9 cwt. of the mixture can be applied per statute acre along with 20 tons farmyard manure. Where no farmyard manure is available the above manurial mixture should be applied at the rate of 9 cwt. per statute acre for the ordinary main crop varieties.

Turnips.—Where finger and toe disease is feared an application of burnt lime should be applied in early spring, if this has not been done in autumn, at the rate of from 20 to 30 cwt. per statute acre. If farmyard manure is available a dressing of 15 tons per acre should be applied, and the only artificial manure then required is a dressing of from 4 to 6 cwt. superphosphate, high grade basic slag, Gafsa rock phosphate or Semsol per statute acre. Where farmyard manure is not available, the following manurial mixture should be used for each statute acre:—

1½ cwt. sulphate of ammonia,
6 cwt. superphosphate or other phosphatic manure,
2 cwt. 30 per cent. potash salts.

Mangels.—This crop responds well to liberal dressings of manures. The following dressing per statute acre is recommended:—

20-25 tons farmyard manure
2 cwt. sulphate of ammonia
4 cwt. superphosphate
4 cwt. kainit

A backward crop will benefit from a dressing of 1 cwt. nitrate of soda per acre at thinning time.

Mangels and Kale.—The following dressing per statute acre is recommended for these crops:—

20-25 tons farmyard manure
2 cwt. sulphate of ammonia
4 cwt. superphosphate
1 cwt. 30 per cent. potash salt

Hay.—Grassland producing crops of meadow or upland hay will benefit from an application of liquid manure at the rate of from 8 to 10 tons per acre. If a dressing of a phosphatic manure was not applied in autumn the land would benefit from an application of 1½ cwt. superphosphate per statute acre, in addition to the liquid manure. Where no liquid manure is available a suitable manurial mixture for hay crops is:—

1 cwt. sulphate of ammonia
2 cwt. superphosphate
1 cwt. 30 per cent. potash salt

applied at the rate of from 3 to 4 cwt. per statute acre.

Pastures.—Where early grass is required a dressing of 1 cwt. sulphate of ammonia per statute acre applied at the end of March or early in April, should be given to pasture which was dressed with a phosphatic manure the previous autumn. In cases where the autumn application of phosphatic manure was neglected a dressing of superphosphate or basic slag should be applied in spring at the rate of from 4 to 6 cwt. per statute acre.

RESULTS OF POTATO VARIETY EXPERIMENTS, 1938

Experiments were again carried out during the past season to ascertain the cropping capabilities of some of the newer varieties of potatoes, as compared with the old standard varieties. Tests with both early and main crop varieties were arranged by the Agricultural Instructors, and with early varieties by the Horticultural Instructors.

Early Varieties.—Ten varieties were prescribed for testing, and the average yields produced by each variety at 8 centres where all the varieties were grown under the supervision of the Agricultural Instructors are given in Table 1. These yields were obtained from diggings made during the last fortnight of July. For comparison purposes the total average yields obtained from the four previous years' trials are included along with the true average yields from the five years' tests, in respect of those varieties which

were under test during those years. A further digging was made when the crops were ripe, and the yields obtained from each variety at that time are given in Table 2.

TABLE I. AVERAGE YIELDS PER STATUTE ACRE.

Variety	1938 (8 centres)								1937-1938 (14 centres)		1934-1938 (39 centres)	
	Ware		Seed		Chats and diseased		Total		True average total yield		True average total yield	
	T.	c.	T.	c.	T.	c.	T.	c.	T.	c.	T.	c.
British Queen ...	7	5	2	2	1	3	10	10	10	7	11	4
Ulster Monarch ...	8	12	1	5	0	12	10	9	10	6	—	
Dunbar Yeoman ...	6	9	1	4	0	16	8	9	9	3	11	1
Arran Pilot ...	6	8	1	4	0	13	8	5	9	2	10	16
Ballydoon ...	6	18	1	3	0	14	8	15	9	1	10	13
Di Vernon ...	5	15	1	11	0	17	8	4	9	9	10	7

It will be seen from the table that the yields in 1938 from all varieties were considerably less than the average for the tests carried out during the five years' period. The poor crops obtained last season were due to the abnormally dry spring, followed by the spell of sharp frost which occurred in April. The varieties British Queen and Ulster Monarch suffered least from the adverse weather conditions, and gave yields which compared favourably with those produced during the previous year.

Generally speaking, the trend of yields was the same in 1938 as in the previous years, but on account of the low yields obtained last year the true average total yield has been reduced, as compared with the true average yield for the four previous years' tests.

British Queen and Ulster Monarch are second early varieties, while the remaining four varieties are first earlies. Of these four varieties Dunbar Yeoman is leading slightly as regards total average yield over the five years' trials, but was beaten by Ballydoon in the 1938 tests. The yields from all four are remarkably close, both when the figures for the 1938 tests and for the average of the five years' tests are considered.

The yields in the above table were obtained from diggings made in July, but it is interesting to see the yields of the same varieties when allowed to grow to maturity on similar plots. The following table gives the average yields per statute acre obtained at six centres when the crops reached maturity.

TABLE 2. AVERAGE YIELDS PER STATUTE ACRE.

Variety	Ware		Seed		Chats and diseased		Total	
	T.	c.	T.	c.	T.	c.	T.	c.
Ulster Monarch	11	5	1	7	1	9	14	1
British Queen	10	10	2	1	1	5	13	16
Arran Pilot	8	2	1	3	1	6	10	11
Ballydoon	8	3	1	0	1	6	10	9
Di Vernon	6	11	1	14	1	6	9	12
Dunbar Yeoman	6	18	1	0	1	8	9	6

It is seen from the table that Ulster Monarch gave the highest total yield at maturity, while British Queen took second place. The other varieties have given substantially lower yields than these two, but from 17 to 46 cwt. per acre more than at the time of the first digging.

The tubers of Dunbar Yeoman have lemon coloured flesh, and are of good eating quality, while those of Arran Pilot are long shaped and very suitable for the requirements of the English market.

The tubers of Ballydoon are similar to those of British Queen in shape, colour and cooking quality. Ballydoon is an immune variety, and very suitable for replacing the non-immune British Queen, but is earlier than that variety.

The new variety Ulster Monarch was included in the trials for the first time in 1937, and as can be seen from the results it again gave a satisfactory yield in 1938. This variety produces good sturdy foliage, having large leaves, and the tubers are kidney-shaped and of good cooking quality.

MAIN CROP VARIETIES.—Eight main crop varieties were tested at 11 centres in 1938. Arran Peak was included for the first time, and Dunbar Standard and Redskin for the second time. The average yields obtained, along with the true average total yields obtained in previous tests are given in Table 3.

TABLE 3. AVERAGE YIELDS PER STATUTE ACRE.

Variety	1938 (11 centres)								1937-1938 (22 centres)		1936-1938 (32 centres)	
	Ware		Seed		Diseased and Chats		Total		True average Total yield		True average Total yield	
	T.	c.	T.	c.	T.	c.	T.	c.	T.	c.	T.	c.
Kerr's Pink ...	12	11	2	0	1	0	15	11	15	7	14	9
Majestic ...	11	3	1	0	1	6	13	8	14	12	14	8
Up-to-Date ...	10	12	2	5	1	15	14	10	15	1	14	4
Arran Victory ...	11	18	1	14	0	16	14	8	14	16	14	3
Gladstone ...	10	18	1	19	1	1	13	15	13	17	13	14
Dunbar Standard ...	11	11	1	2	0	12	13	6	14	8	**	
Redskin ...	8	19	1	9	0	14	11	2	12	8	**	
Arran Peak ...	10	19	1	1	0	19	12	19	*		**	

* Tested one year only. ** Tested two years only.

Kerr's Pink gave a good yield in last year's test, and the true average total yield for this variety is now slightly higher than Majestic which, however, still maintained a good steady yield.

Of the three new varieties Dunbar Standard gave the best total yield, and by far the best yield of ware potatoes. The haulms are tall and erect, providing good cover for the suppression of weeds. The tubers are kidney-shaped, white-skinned, and of good cooking quality. It is a late maturing variety, and is fairly resistant to blight.

Arran Peak has also given a good average yield. This variety matures about the same time as Majestic, and earlier than Dunbar Standard. The haulms are rigid and of medium height. The tubers are well shaped, being oval to long, and are white in colour. The cooking quality is good.

Gladstone is an early maincrop variety which produces white-skinned tubers with splashes of pink. The cooking quality is excellent, and the variety is suitable for replacing the non-immune King Edward. In tests carried out in Northern Ireland to compare the cropping capacity of Gladstone and King Edward, Gladstone always produced much heavier yields than King Edward.

Redskin is also an early maincrop. This variety produces haulms of medium height, and tubers which resemble Kerr's Pink in colour and shape, but have shallower eyes. In these tests, however, its cropping capacity has been inferior to that of Kerr's Pink.

Further information and descriptive notes relating to the newer varieties of potatoes are given in Leaflet No. 7—Potato Trials. Lists giving the names and addresses of growers of some of the varieties mentioned in these trials whose crops have been inspected and certified by the Ministry and show a high degree of freedom from diseases, such as leaf roll and mosaic, can be obtained from the Ministry, free, on request.

RESULTS OF OAT VARIETY TRIALS.

While certain varieties of oats yield good crops when grown on rich soils, the results obtained from these varieties on poor soils are often disappointing. In the same way other varieties which would not make the best use of rich soil give quite satisfactory yields when grown on poor soil. In these variety trials this distinction in varieties has been made, and certain varieties were grown on rich soils, while others were grown on poorer soils and in hilly districts. The yields produced by the varieties in each group are tabulated separately.

Varieties suitable for Good Soils.—The same eight varieties were specified for test in 1938 as were included in the 1937 trials, and the average yields obtained are given in the following table:—

AVERAGE YIELDS PER STATUTE ACRE.

No. of Centres and years of Test	King		Crown		Stormont Arrow		Utility		Stormont Iris		Onward		Elder		Victory	
	Grain c. q.	Straw cwt.	Grain c. q.	Straw cwt.	Grain c. q.	Straw cwt.	Grain c. q.	Straw cwt.	Grain c. q.	Straw cwt.	Grain c. q.	Straw cwt.	Grain c. q.	Straw cwt.	Grain c. q.	Straw cwt.
1938																
7 centres	—	—	—	—	24 1	42	21 2	44	—	—	—	—	—	—	—	—
5 ,,	—	—	26 0	37	26 0	42	22 2	43	—	—	27 3	38	—	—	—	—
5 ,,	—	—	—	—	21 3	40	19 0	39	—	—	—	—	21 2	37	—	—
4 ,,	—	—	24 3	38	24 3	44	21 3	45	—	—	28 0	40	24 3	42	—	—
4 ,,	—	—	—	—	23 1	44	20 2	44	—	—	—	—	—	—	20 2	42
3 ,,	24 2	35	27 3	36	25 3	41	22 3	43	—	—	28 3	37	—	—	—	—
3 ,,	—	—	—	—	23 3	40	21 1	41	22 1	37	—	—	—	—	—	—
2 ,,	21 2	38	26 0	37	23 2	44	21 2	47	—	—	29 1	41	26 0	42	—	—
True Average 1937-1938																
14 centres	—	—	24 3	36	24 1	39	21 3	40	—	—	25 1	41				
7 ,,	23 3	37	26 2	37	24 3	39	21 2	41	—	—	27 0	35				
True Average 1929-1938																
65 centres	21 2	33	22 3	33	22 0	33										

As there were only six of the eight varieties specified for testing grown at any one centre it is only possible to compare the results of the different varieties which were grown at the same centres. The table should be read horizontally, i.e., only the figures in one horizontal line can be compared with each other. The order of the leading varieties in the 1938 test, considering only the yield of grain, is as follows:—(1) Onward, (2) Crown, (3) Elder, (4) Stormont Arrow. Unfortunately there are very few results for the other varieties but such results as are available would indicate that these are poorer yielders than the four mentioned above.

The results from the tests carried out both in 1937 and 1938 show that Onward is a very promising variety.

The true average yields for Crown, Stormont Arrow and King show that there was very little difference in the yields of these varieties at 65 centres at which they were tested during the past nine years, and while Crown gave the highest yield, any of these varieties can be depended on to give a satisfactory yield where soil conditions are suitable.

Varieties Suitable for Poorer Soils in Hilly Districts.—Six varieties which were considered likely to give satisfactory results on poorer classes of soil were grown on such soil and the average yield of each per statute acre is given in the following table:—

AVERAGE YIELD PER STATUTE ACRE.

Year	No. of Centres	Stormont Kern		R. 30		Utility		Tam Finlay		Gordon Sandy		Short Grained Tyrone Tawny	
		Grain c. q.	Straw cwt.	Grain c. q.	Straw cwt.	Grain c. q.	Straw cwt.	Grain c. q.	Straw cwt.	Grain c. q.	Straw cwt.	Grain c. q.	Straw cwt.
1938	10	16 1	35	16 1	36	15 3	35	15 0	37	—	—	—	—
„	8	14 3	31	14 3	34	14 1	31	14 2	34	14 1	31	12 3	28
1937	12	16 2	31	—	—	—	—	16 1	36	16 3	32	15 3	32
1935-1938	35	17 0	33	—	—	—	—	17 0	35	17 0	32	15 3	31

Stormont Kern has given good yields during the four years in which it has been tested. It ripens earlier than Tam Finlay and may be used to replace that variety.

R.30 is a selection of potato oat which was raised in Scotland. It has given promising yields in the 1938 test, but further tests will have to be carried out before an opinion can be offered on the merits of this variety.

Utility, which was also included with the varieties tested on better classes of soil, is an oat of the potato type and has given quite a satisfactory yield in the 1938 tests, but not so good as it gave in the good land trials.

Short Grained Tyrone Tawny has yielded quite well although not so well as some of the other varieties. It is suitable for very poor soils and is noted for its great stooling capacity. The short grained type has a shorter and plumper grain than the ordinary Tyrone Tawny in commerce.

Farmers wishing to obtain supplies of seed of any of the varieties mentioned should consult the Agricultural Instructor for the district who may be able to advise with regard to a suitable source of supply.

RESULTS OF BARLEY VARIETY TESTS.

During 1938 further experiments were carried out by the Agricultural Instructors to determine which varieties of barley are best suited to the soil and weather conditions which prevail in Northern Ireland.

In addition to Spratt-Archer, Old Common (Chevalier) and Svalóf Victory which were tested in 1937, Abed Kenia was included in the 1938 tests.

The following table shows the true average yield of each variety for the various periods in which the varieties were tested.

Period and number of centres	Spratt-Archer		Old Common (Chevalier)		Svalóf Victory		Abed Kenia	
	Grain c. q.	Straw cwt.	Grain c. q.	Straw cwt.	Grain c. q.	Straw cwt.	Grain c. q.	Straw cwt.
1938 (10 centres for grain)	24 0	43	21 2	39	24 3	35	26 2	35
1937/38 (18 centres for grain) ...	20 3	38	18 3	36	20 0	32	*	*
1935/38 (34 centres for grain) ...	20 3	35	19 2	33	**	**	—	—

* Tested for one year only. ** Tested for two years only.

Spratt-Archer has given good results during all the tests but it is interesting to note that both Svalóf Victory and Abed Kenia gave higher yields of grain than Spratt-Archer in the 1938 tests.

Abed Kenia is a short-strawed variety which stands up well, even in peaty soils. It ripens about the same time as Old Common, which is slightly earlier than Spratt-Archer. Unfortunately, it is reputed to be liable to attacks of smut disease. Although this variety gave the highest average yield of grain in the 1938 tests, further tests will be necessary before a definite recommendation as to its suitability for Northern Ireland conditions generally can be made.

Svalöf Victory is a strong-strawed variety, which ripens earlier than any of the other varieties included in the tests. It has given consistently good yields in the past two years' tests. The colour and quality of the grain are generally good.

These tests show that very satisfactory crops of barley can be grown in Northern Ireland, and that the yields obtained compare favourably with those recorded from other parts of the British Isles. Bearing in mind the value of barley meal for pig fattening, it is urged that a greater area of barley should be grown. One point, however, should be kept in mind, namely, that satisfactory yields of barley will not be obtained from sour soil. Barley should be grown in fields which have been limed recently, and those contemplating the sowing of barley should take advantage of the Land Fertility Scheme to obtain lime cheaply. The Land Fertility Scheme is of great value to the pig keeper as it enables him to obtain lime at a cheap price and thus to extend the area on which good crops of barley can be grown. By growing more barley he is producing a food which is eminently suitable for the production of pigs of best quality, and is thus helping himself not only to produce pigs cheaply, but also to obtain the fullest benefits from the Pigs Marketing Scheme by having pigs of best quality for sale. Full particulars regarding the application of lime are given in Leaflet No. 84.

As lime is usually applied to the ground after the root crop has been harvested, farmers who follow the rotation ; oats, roots, oats, hay and grazing, and who propose to grow barley can either substitute barley for the second oat crop in the rotation, or, if it is desired to reduce the proportion of root crop, a crop of barley can be taken after that oat crop. In either case the barley would be the nurse crop for the seeds. Barley is a good nurse crop and there need be no fear of sowing the grass seeds and clover mixture with it. The lime should be applied after the ground has been ploughed for the barley, and it will thus be kept in the top layers of the soil and will benefit both the barley crop and the succeeding hay and pasture.

It should also be borne in mind, that under the Agriculture Act, 1937, a subsidy is given to farmers who grow barley, if the average price falls below a certain level, irrespective of whether the crop is utilised on the farm or sold. Farmers who grow barley for pig feeding thus stand in a very favourable position if barley prices are low.

RESULTS OF WHEAT VARIETY TRIALS.

During 1938 further tests were carried out by the Agricultural Instructors with the object of ascertaining the yields from certain autumn varieties of wheat and to compare the suitability of the different varieties when grown under Northern Ireland conditions.

In addition to the six varieties tested in 1937 Wilma was included in the 1938 Trials. Wilma is not a new variety, but a selection of Queen Wilhelmina, which is a well-known and reliable variety. At only three centres, however, were both Wilma and Queen Wilhelmina grown.

The following table shows the average yields of the different varieties :—

Year	Number of centres	Victor		Squarehead's Master		Wilma		Queen Wilhelmina		Redman		Yeoman II		Little Tich	
		Grain	Straw	Grain	Straw	Grain	Straw	Grain	Straw	Grain	Straw	Grain	Straw	Grain	Straw
		c. q.	cwt.	c. q.	cwt.	c. q.	cwt.	c. q.	cwt.	c. q.	cwt.	c. q.	cwt.	c. q.	cwt.
1938	9	20 1	41	19 3	38	—	—	—	—	20 2	36	—	—	17 4	35
1938	6	21 1	45	18 5	39	18 1	37	—	—	20 2	37	17 3	37	18 1	37
1938	3	24 3	51	23 1	46	21 2	41	23 1	43	24 2	45	—	—	21 1	41
1937	3	21 3	42	16 2	36	—	—	23 3	38	13 1	34	17 2	30	15 0	24
1936	6	16 3	30	16 2	29	—	—	19 2	32	16 0	30	17 2	28	13 3	28
Average yields 1936-1938	12	20 0	30	18 1	35	—	—	21 12	36	17 2	35	—	—	16 0	30

As in previous years, Queen Wilhelmina gave a high yield of grain. This variety does best on rich soils and produces a large, plump grain. It is a variety that can be recommended where the soil is of a type and quality suitable for the production of good crops of wheat.

Wilma has given quite good yields, but has not been shown by these tests tests to be superior to Queen Wilhelmina.

Victor has maintained its reputation as a good yielding variety. It has a white grain and produces straw of medium length. In many respects it is like Queen Wilhelmina, and may be depended on to succeed under conditions which are suitable for the successful cultivation of that variety. Victor is noted for its power to withstand conditions which encourage lodging of the crop and is therefore suitable for growing on strong, rich soils, or under circumstances where the lodging of the crop is feared.

Yeoman II. is a red wheat which requires good soils for a full crop. It usually stands up well on rich soils where other varieties may lodge. It has given quite good yields of grain in the tests.

Squarehead's Master is a standard, well-known variety which can be depended upon to give a satisfactory yield under widely varying conditions. It has given consistently good yields of grain throughout all the tests.

Redman gave a higher yield in the 1938 test than in previous tests, but the true average yield for this variety is substantially below that of the other varieties. It produces plump, red grain and the straw is strong.

While Little Tich has given quite good yields in the 1938 tests it has not been a reliable cropper in previous years, and it does not appear to be worthy of further trial.

ANNOUNCEMENTS AND REMINDERS.

GENERAL.

Ox Warble Fly.—The Ox Warble Fly Order requires that cattle shall be dressed with a suitable derris wash between 15th and 22nd March and at intervals of 28 days afterwards, until no further warble swellings appear. Neglect to destroy the warble maggots at the proper time may lead to a prosecution. All cattle owners are warned that the Ministry intends during the coming seasons to enforce the provisions of the Order even more strictly than heretofore.

Annual Reports of County Agricultural Committees.—The Annual Reports of the County Committees of Agriculture for the year 1938 will soon be available and may be obtained free from the Secretary or Agricultural Organiser of the County Committee of Agriculture for the County. These reports contain up-to-date information on various problems connected with farming, poultry-keeping and gardening, as well as a detailed account of the results of experiments carried out by the Instructors during the year. The names and addresses of the Secretaries and Agricultural Organisers are given on page 628.

Poultry Stations and Accredited Poultry Farms.—Lists giving the names and addresses of hen, duck, goose and turkey stations can be obtained free from the Secretary or Agricultural Organiser of the County Committee of Agriculture. Lists of owners of Accredited Poultry Farms can be obtained from the Ministry, free, on request. The breeding stock on these farms has been carefully selected and the hens have passed the test for Bacillary White Diarrhoea disease. Those requiring eggs for hatching should obtain them from Accredited Farms or from County Poultry Stations.

New Varieties of Oats.—Farmers wishing to obtain supplies of new varieties or strains of oats should communicate with the Agricultural Instructor for the district, who may be able to help with regard to obtaining reliable supplies. Owing to the bad harvesting season, it will be necessary to exercise extreme care this year in selecting seed for sowing as many stocks will have suffered from the effects of the weather. All doubtful samples should be sent for testing by the Ministry's Seed Testing Station. The cost to farmers is only 3d. per sample.

Barley.—Supplies of barley seed should be obtained in good time. Farmers who have not previously grown barley should consult the Agricultural Instructor for the district as to the most suitable variety to grow, the time of sowing, and the treatment this crop should receive.

Seed Potatoes.—Lists giving the names and addresses of growers of pure and healthy stocks of seed potatoes can be obtained from the Ministry, free, on request. Heavier yields will be obtained from healthy stocks than from those which are diseased.

FORESTRY.—The tree planting season will soon be over and farmers wishing to take advantage of the Ministry's scheme for the supply of young forest trees at cheap rates should apply immediately for particulars of the scheme and varieties of trees available. The cost of the trees is only 30/- per 1,000.

STOCK BULLS.—Farmers are advised to purchase bulls of the best quality they can afford to obtain, and not to use animals which are of the minimum standard for obtaining licences. It is only by using sires of a high standard that the quality of the cattle generally can be improved. There seems to be a desire on the part of more farmers than formerly to keep bulls solely for the service of their own cows, and this is leading to a reduction in the number of premium bulls in some districts. In view of this it is particularly important that the quality of the bulls purchased should be at least as high as that for premium bulls, for if not the standard of the stock in the district will decline. Farmers proposing to buy premium bulls should attend the show and sale at Balmoral, Belfast, on 28th February, and 1st and 2nd March, or that at Londonderry on 14th and 15th March.

LECTURES.—The following lectures have been arranged by County Committees of Agriculture:—

County	Day & Date	Centre	Time	Subject
Down	Fri., 17th Feb.	Ballyvalley Hall, Mayobridge.	8-0 p.m.	Agricultural Topics.
	Wed., 8th Mar.	Drumaness P.E. School, Ballynahinch.	8-0 p.m.	Cultivation of Vegetables for Home Use.
Londonderry	Tues., 21st Feb.	P.E. School, Dungiven.	8-0 p.m.	Cultivation of Flowers.
	Tues., 7th March	The National Hall, Bellaghy.	8-0 p.m.	Cultivation of Vegetables.
	Wed., 8th March	The Women's Institute Hall, Garvagh.	7-30 p.m.	Cultivation of Flowers.
	Tues., 14th March	The Old School, Tobermore.	7-30 p.m.	do.
Tyrone	Fri., 24th March	Crossan P.E.S., Dromore.	8-0 p.m.	Fruit and Forest Trees.
	Fri., 24th March	Sixmilecross P.E.S.	8-0 p.m.	Cultivation of Vegetables.

CLASSES IN POULTRY KEEPING.—The following classes have been arranged by the County Committees of Agriculture stated:—

County	Day and date of commencement of Class	Centre	Time at which Class is held
Antrim	Monday, 6th Feb.	Taylorstown Orange Hall.	8-0 p.m.
Londonderry	Monday, 6th Feb.	Lisnamorrow P.E. School, Magherafelt.	7-0 p.m.
	Monday, 6th Feb.	Ballinteer Orange Hall, Macosquin.	7-0 p.m.
Tyrone	Monday, 20th Feb.	Newmills P.E.S.	7-30 p.m.

WIRELESS BROADCASTS.—The following arrangements for broadcasts from the Belfast Studios of the British Broadcasting Corporation have been made:—

Date	Subject	Time	Speakers
27th Feb., 1939	Talk: Utilisation of waste land for growing seed potatoes.	8-15 p.m.	Mr. J. C. Baird, B.Sc., B.Agr., Ministry of Agriculture.
13th March, 1939	Discussion on agricultural education.	9-15 p.m.	Mr. H. N. V. Kennedy, Ardtole Cottage, Ardglass, and Mr. Patrick Conway, Feeny, Londonderry.
27th March, 1939	Talk: Plants poisonous to live stock.	—	Mr. P. A. Linehan, M. Agr., Queen's University, Belfast.

TRAINING FOR GIRLS IN POULTRY KEEPING, DAIRYING AND HOUSEWIFERY.—Valuable courses of instruction, which include both classroom tuition and practical experience, in poultry keeping, dairying and rural housewifery are provided at the North West School, Strabane, and at the Ulster Dairy School, Cookstown. Each County Committee of Agriculture provides a limited number of Scholarships for girls in their respective Counties, which enable the holders to obtain a course of instruction, free, at the North West School. The next session at that School begins on Tuesday, 4th April, and girls who intend to be candidates for the free Scholarships should make application at once to the Secretary or Agricultural Organiser of the Committee for the County in which they reside. The names and addresses of these officers are given on page 628 of this report. There is no qualifying examination for these Scholarships and they are awarded in the order in which applications are received. Copies of the School prospectus, which contains an application form, will be sent free, on request.

The next session at the Ulster Dairy School begins on Tuesday, 2nd May, and the Ministry is now receiving applications from girls who propose to enter the School for that session. Girls whose applications are received soon will likely obtain admission to the School on 2nd May, and it is, therefore important that those who propose to enter the School next May should apply at once. Copies of the prospectus, which contains an application form, will be supplied, free, on request.

FREE ADVICE ON FARMING PROBLEMS.

Farmers are reminded that the County Committees of Agriculture employ Instructors in Agriculture, Horticulture and Poultry Keeping who are fully qualified to give advice on problems connected with these occupations.

Those wishing to obtain the services of these Instructors should communicate with the Secretary to the County Committee, or Agricultural Organiser for the County at the address given below, when arrangements will be made for an Instructor to visit and give free advice.

A farmer, gardener or poultry keeper would be well advised to invite the Instructor to pay a visit to his holding, at least once each year, in order to discuss on the spot the various problems which concern the general management of the farm or garden or the poultry. The Instructors have a wide experience of various methods and practices and are, therefore, in a position to offer much useful advice, which in all cases is given free of charge.

County	Name and Address of Secretary or Organiser.
Antrim	A. B. Clarke, B.A. (Secretary), Courthouse, Crumlin Road, Belfast.
Armagh	S. Jordan, B.Agr. (Organiser), Russell Street, Armagh.
Down	J. L. M'Whinney, B.Sc., A.R.C.Sc.I. (Organiser), Northern Bank Chambers, May Street, Belfast.
Fermanagh	W. T. M'Clintock, B.Agr. (Organiser), Courthouse, Enniskillen.
Londonderry	T. K. Caldwell (Secretary), Courthouse, Coleraine.
Tyrone	W. Walsh (Secretary), Courthouse, Omagh.

ULSTER DAIRY SCHOOL, COOKSTOWN.

The final term of the year 1938 ended on the 23rd December last, and the results of the examinations held at the end of the term are announced.

The three fifth term pupils, Miss M. Caskey, Edenmore House, Limavady, County Londonderry, Miss J. Fulton, Thornhill, Ballykelly, County Londonderry, and Miss L. G. Irvine, Ballyvallough, Raloo, Larne, County Antrim, who are pursuing the Senior Course for teachers-in-training, passed the examinations and are continuing their training.

Miss E. Donaghy, Tullydonnell, Silverbridge, Newry, County Armagh, who specialised in Dairying, qualified for the award of a Creamery Scholarship which entitles her to a period of twenty-four weeks' training at a Creamery approved by the Ministry with a view to qualifying for the Ministry's Certificate of Competency in Creamery Buttermaking.

Miss M. Duncan, Drumakeel, Ballycastle, County Antrim, and Miss A. McMullan, The Grove, Carnlough, County Antrim, who obtained first and second places at the examination for third term pupils gained certificates in all subjects and have been awarded free scholarships to specialise in Dairying and Poultry-keeping respectively for a further term at the School.

The following additional third-term pupils were successful in qualifying for certificates in Poultry-keeping, Dairying and Domestic Science.

Miss J. M'Cluney, Galgorm Parks, Gracehill P.O., Ballymena, County Antrim.
Miss M. Maguire, Aughoo, Tullyrosmearn P.O., County Fermanagh.
Miss I. Maxwell, Mullaghmore, Augher, County Tyrone.
Miss M. H. Owens, Skelgagh, Clogher, County Tyrone.
Miss E. Thompson, Ballooley, Katesbridge, County Down.

For the term which commenced on the 10th January, the following new pupils were admitted to begin the course of training :—

Miss A. M. Barfoot, Longfield House, Desertmartin, County Londonderry.
Miss V. E. Coulter, Glassmullagh, Knockaraven P.O., Enniskillen, County Fermanagh.
Miss E. J. Edgar, Gargadis, Trillick, County Tyrone.
Miss M. Fee, Cavans, Fivemiletown, County Fermanagh.
Miss W. S. Grimley, Clonmore, Tamnamore, Dungannon, County Tyrone.
Miss S. R. Hunter, "Rosemount," Gortfadd, Portglenone, County Antrim.
Miss S. M. Magill, Altnamackin, Newry, County Down.
Miss E. A. Martin, 2 Dacre Terrace, Londonderry.
Miss M. C. Morrison, Springwellknowe, Dervock, County Antrim.
Miss M. J. O'Donnell, Tamnagh Park P.O., County Londonderry.
Miss S. J. Read, Kimmid, Pettigo, County Donegal.
Miss E. Scott, Mill Farm, Muckamore, County Antrim.
Miss M. J. Semple, The Mills, Dungiven, County Londonderry.

The next term at the school will commence on the 2nd May, and terminate on the 11th August, 1939. Applications for admission to this term are now being received by the Ministry, and girls who intend to take out a course of training should submit their applications to the Ministry as soon as possible, as equally eligible applicants are admitted to the School in the order in which their applications are received. There is no qualifying examination for admission. Copies of the prospectus, containing application forms, may be obtained free of charge from the Secretary of any County Committee of Agriculture, from the local Instructor in Poultry-keeping, from the Lady Superintendent, Ulster Dairy School, Cookstown, or from the Secretary, Ministry of Agriculture, Stormont, Belfast.

NORTH WEST SCHOOL, STRABANE.

The first term of the year 1939 began at this school on the 3rd January last. The following are the names and addresses of the pupils now in residence at the school, all of whom hold scholarships awarded by the various County Committees of Agriculture.

County Antrim :
Miss M. P. Stevenson, Knockans, Finvoy, Ballymoney. (2nd termer.)

County Armagh :
Miss R. Jackson, Druminiss, Richhill.
Miss E. O'Hanlon, Cullyhanna.

County Down :
Miss E. Spiers, Flush, Drumadonald, Ballyroney.

County Fermanagh :
Miss E. J. Chambers, Clonursan, Macken P.O., Enniskillen.

County Londonderry :
Miss I. L. Buchanan, Gorticross, Drumahoe P.O.
Miss M. Cartin, Craigbane, Claudy.
Miss E. B. Cromie, Ballyness, Dungiven.
Miss A. K. Hood, Kilgort, Park.
Miss K. T. M'Namee, Cavanreagh, Draperstown.

County Tyrone :
Miss M. J. Devine, Dunaboe, Donemana.
Miss M. M. Devine, Woodend, Strabane.
Miss J. Forbes, Lisnarrow, Donemana.
Miss M. O'Kane, Segully, Drumquin.
Miss S. E. Scott, Tamnaclare, Bready, Strabane.

The County Committees of Agriculture are offering a limited number of Scholarships to cover the cost of tuition, board and residence at this school for the session which will commence on the 4th April next, and girls desirous of being considered for the award of these scholarships should submit their applications as soon as possible to the Secretary (or Agricultural Organiser) of the County Committee of Agriculture for the county in which they reside. There is no qualifying examination for admission. Copies of the prospectus, containing application forms, may be obtained free of charge from the Secretary (or Agricultural Organiser) of any County Committee of Agriculture, from the local Instructor in Poultry-keeping, from the Lady Superintendent, North West School, Strabane, or from the Secretary, Ministry of Agriculture, Stormont, Belfast.

SCHOLARSHIPS IN CREAMERY MANAGEMENT.

The Ministry of Agriculture offers this year for competition two scholarships which will enable the holders to pursue a course of technical training at the University College, Cork, with a view to qualifying for the post of Creamery Manager. The Course is of two years' duration, and candidates who are successful at the Competitive Examination will be enabled to pursue the course leading to the College Diploma in Dairy Science. In view of the provision in the Marketing of Dairy Produce Act (Northern Ireland) that Managers of Central and Auxiliary Creameries shall hold qualifications of a standard prescribed by the Ministry, this opportunity of obtaining the requisite training is of special importance, as the Diploma referred to above is one of the highest qualifications which a Creamery Manager can possess. The Course will consist of two terms of technical training at University College, Cork, during the winters of 1939-40 and 1940-41, with an intervening period of practical training of 20 weeks' duration at the College Experimental Creamery, and at an approved Creamery in Northern Ireland in the summer of 1940.

Applicants for these Scholarships must be between 18 and 30 years of age on the 1st October, 1939, and must be resident or the sons of residents in Northern Ireland for the 12 months ended 31st December, 1938. Previous knowledge of creamery work is not essential, but a good standard of general education will be required.

Application forms and full particulars regarding the Scholarships may be obtained from the Secretary, Ministry of Agriculture, Stormont. It should be noted that the prescribed form of application, duly completed, must be lodged with the Ministry not later than the 15th April, 1939.

EXTENT AND PRODUCE OF THE POTATO CROP IN NORTHERN IRELAND, 1938.

Year	Total Acreage	Total Produce	Average yield per Statute Acre
	Acres	Tons	Tons
1938	123,483	711,369	5.8
1937	125,426	867,979	6.9
Average for the period 1928-37 ...	138,212	936,927	6.8

The estimated produce and yield per acre shown in this table represents in all cases the yield of sound tubers only.

SEVENTEENTH
EGG LAYING TEST AT STORMONT.

The fourth period of four weeks ended on the 20th January, 1939. There was an increase in egg production, and a further increase in the proportion of scoring eggs.

The total number of eggs laid by the competing birds during the period was 10,896, which gives an average of 14.41 eggs per bird as compared with 13.46 for the previous period and 13.5 for the fourth period of the previous test. Of the 10,896 eggs laid 9,893 (90.79 per cent.) were scoring eggs, i.e., 2 ozs. or over in weight..

The average production during the 16 weeks the test has been in progress, based on the flock of 756 birds, was 49.76 eggs per bird, as compared with 49.5 for the corresponding 16 weeks of the previous test.

The highest sectional average egg production is to the credit of the White Wyandottes in Section 2, viz., 17.6 eggs per bird, the Rhode Island Reds in Section 6 being next with an average of 17.3 eggs per bird.

Nine birds died during the period and 26 since the test began, which represents a morality rate of 3.43 per cent., as compared with 3.8 per cent. for the corresponding 16 weeks of the previous test.

The following are particulars of the leading pens in each Section :—

SECTION 1. WHITE WYANDOTTES (Open). 20 pens.

Position	No. of Pen	Name and address of Owner.	Number of eggs laid.				Test Score
			Super Grade	1st Grade	2nd Grade	Below 2nd Grade	
1	1	Mrs. K. Bamforth, Melmount Road, Strabane, Co. Tyrone.	244	147	12	—	391
2	12	Mr. J. Lenaghan, Tyconnett, Ballynahinch, Co. Down.	136	251	22	—	387
3	11	Mr. J. Lenaghan, Tyconnett, Ballynahinch, Co. Down.	166	209	28	—	375
4	19	Dr. J. Stuart, Killyflue, Ballymena, Co. Antrim.	70	298	113	1	368
5	16	Mrs. A. Peel, Oakleigh, Roses Lane Ends, Belfast.	103	256	43	—	359

SECTION 2. WHITE WYANDOTTES (Station Holders). 10 pens.

Position	No. of Pen	Name and address of Owner.	Number of eggs laid.				Test Score
			Super Grade	1st Grade	2nd Grade	Below 2nd Grade	
1	25	Miss A. Brown, Ballyhill, Crumlin, Co. Antrim.	108	295	46	—	403
2	30	Mrs. M. J. Veitch, Knockninny, Thompson's Bridge, Enniskillen, Co. Fermanagh.	223	161	20	—	384
3	23	Mrs. J. Armstrong, Keeranbeg House, Donagh, Lisnaskea, Co. Fermanagh.	137	189	39	3	326

SECTION 3. WHITE LEGHORNS (Open). 10 pens.

1	39	Mr. J. Telford, Drumarkin, Rathfriland, Co. Down.	172	192	43	1	364
2	41	Mr. J. Waugh, Aldfreck, Ballycarry, Co. Antrim.	112	239	60	—	351
3	34	Mrs. H. M. Fletcher, Ashgrove, Lisadian, Hillsborough, Co. Down.	61	144	45	—	205

SECTION 4. WHITE LEGHORNS (Station Holders). 11 pens.

1	52	Mrs. J. Short, Tullyvalley, Seskinore, Omagh, Co. Tyrone.	123	190	116	1	313
2	50	Miss I. J. Magill, Mulloughdrin, Dromara, Co. Down.	82	223	82	5	305
3	47	Miss I. Gilmer, Rashee, Ballyclare, Co. Antrim.	37	236	69	1	273

SECTION 5. RHODE ISLAND REDS (Open). 29 pens.

1	66	The Marquis of Hamilton, Baronscourt, Omagh, Co. Tyrone.	197	250	25	—	447
2	73	Mrs. J. M'Neill, Drain's Bay, Larne, Co. Antrim.	220	144	10	—	364
3	67	Miss J. A. Irwin, Mount Irwin, Tynan, Co. Armagh.	75	257	35	1	332
4	74	Mr. R. J. O'Hanlon, Mullahead, Tandragee, Co. Armagh.	175	147	130	1	322
5	61	Mrs. E. R. Dunwoody, Benmore, Islandmagee, Co. Antrim.	64	231	68	2	295

SECTION 6. RHODE ISLAND REDS (Station Holders). 11 pens.

Position	No. of Pen	Name and Address of Owner.	Number of eggs laid.				Test Score
			Super Grade	1st Grade	2nd Grade	Below 2nd Grade	
1	83	Mrs. H. H. Dickson, Lower Coagh, Co. Tyrone.	154	264	61	—	418
2	89	Miss S. M'Kee, Ardmillan House, Killinchy, Co. Down.	133	264	59	—	397
3	82	Mrs. H. Rea, Lisowen, Listooder, Crossgar, Co. Down.	194	192	24	—	386
SECTION 7. ANY OTHER PURE BREED. 25 Pens.							
1	107	Mr. R. Holmes, Killykergan, Coleraine, Co. Londonderry (Buff Rock).	91	265	115	1	356
2	108	Mr. R. Holmes, Killykergan, Coleraine, Co. Londonderry (Buff Rock).	202	110	23	—	312
3	106	Mr. R. Holmes, Killykergan, Coleraine, Co. Londonderry (Buff Rock).	65	225	164	4	290
4	97	Miss M. A. Lawson, Roundhill House, Strabane, Co. Tyrone (Light Sussex)	137	137	38	3	274
5	114	Mr. John N. Barnhill, Brackfield, Strabane, Co. Tyrone (Silver-Grey Dorking).	28	234	102	4	262
SECTION 8. CLUB ENTRIES. 10 pens.							
1	124	Dungannon Poultry Club, Co. Tyrone. (White Wyandottes)	134	204	66	—	338
2	120	Ballywalter Young Farmers' Club, Co. Down. (Rhode Island Reds)	142	192	24	—	334
3	126	Portadown Poultry Club, Co. Armagh. (Rhode Island Reds)	29	283	107	1	312

"Test Score" means the total of the super-grade and first-grade eggs.

Pen No. 66 of Rhode Island Reds entered by the Marquis of Hamilton is the leading Pen in the entire test and has qualified provisionally, subject to fulfilling the other conditions of the test, for the award of the Challenge Cup offered by the Scientific Poultry Breeders' Association and also for the Ministry's special award in respect of the Pen laying the greatest number of scoring eggs during the first four periods (16 weeks) of the test.

Mrs. H. H. Dickson's Pen No. 83 of Rhode Island Reds in the Station-holders' Section for that breed is second, and third place is held by Miss A. Brown's Pen No. 25, of White Wyandottes in Section 2.

PRICES OF FEEDING STUFFS AT SPECIFIED CENTRES.

The following table shows the retail cash prices per cwt. of Feeding Stuffs at 1st February, 1939, in ten representative centres in Northern Ireland.

	Antrim	Armagh	Ballymena	Belfast	Castlewellan	Coleraine	Dungannon	Enniskillen	Omagh	Strabane
Protein Foods :	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.
Linseed (whole)	14 0	16 0	16 0	16 0	—	18 6	—	—	—	—
Linseed Cake, home-made ...	—	13 0	11 6	11 6	—	12 6	14 0	12 6	12 0	—
Linseed Cake, foreign ...	11 6	12 0	—	11 0	11 9	12 0	12 0	12 0	11 0	10 9
Linseed Cake Meal	11 6	13 0	11 6	11 0	—	12 0	14 0	—	11 6	11 0
Cotton Cake, decorticated ...	9 0	—	9 3	10 6	10 0	9 9	10 0	10 6	9 6	10 0
Earthnut Cake, decorticated ...	9 0	—	9 0	9 0	—	8 9	9 6	8 6	9 0	8 6
Soya Bean Meal (extracted) ...	10 0	10 0	10 3	10 0	—	11 6	10 0	11 0	11 6	11 0
Fish Meal (60% protein) ...	17 0	17 0	16 6	16 6	—	16 6	17 0	17 6	16 6	16 3
Meat Meal (60% protein) ...	16 6	15 0	14 3	13 6	14 0	—	16 6	—	15 6	16 6
Meat and Bone Meal (40% protein)	—	10 6	—	9 6	—	9 6	9 6	—	—	10 6
Medium Protein Foods :										
Palm Kernel Cake	—	—	8 6	7 6	—	9 9	—	—	—	—
Palm Kernel Meal	—	9 6	8 6	7 6	—	9 9	—	—	—	—
Starchy Foods :										
Maize (whole)	7 3	—	7 7½	7 0	—	7 9	8 0	7 9	—	—
Maize Meal	7 6	7 9	7 7½	7 6	7 9	7 9	8 0	7 9	7 9	7 6
Maize Flaked	8 0	8 6	8 1½	8 0	8 0	8 6	8 6	8 6	8 6	8 6
Wheat (whole)	6 6	6 6	—	6 3	6 6	6 6	7 0	7 6	8 0	6 6
Bran, Red	7 6	7 6	7 0	7 6	—	8 0	8 0	8 6	8 3	7 9
Bran, White	8 6	8 6	8 4½	9 0	8 9	9 3	9 6	9 3	10 0	9 6
Pollard, Brown	7 6	7 6	7 7½	7 6	—	8 0	8 0	8 3	8 3	7 3
Pollard, White	—	8 6	8 0	9 0	8 9	8 3	9 6	9 0	9 6	8 6
Barley Meal	7 9	8 0	7 7½	7 6	7 3	8 6	8 0	8 3	8 6	8 0
Tapioca Root Flour	—	—	6 6	7 0	—	—	—	7 9	—	7 0
Oats (whole)	7 6	6 6	6 6	6 9	5 6	6 3	8 0	7 3	6 6	6 0
Crushed Oats	8 0	7 3	7 0	7 6	6 0	6 9	8 6	8 0	7 6	7 0

NON-CONCENTRATES :—The average prices at representative markets at the beginning of February, 1939, were as follows : Potatoes (Main Crop), 3/1½d. per cwt. ; Upland Hay, 61/7d. per ton ; Meadow Hay, 45/5d. per ton ; Oat Straw, 42/7d. per ton ; Turnips (Swede), 17/6d. per ton.

AVERAGE PRICES OF FEEDING STUFFS.

The following table shows the average retail cash prices per cwt. of feeding stuffs at 1st February, 1939, with comparative prices as at the first of the previous month; the costs per unit of protein equivalent and of starch equivalent are also given in respect of each month.

	Protein Equivalent	Starch Equivalent	Average price per cwt. at 1st Feb. 1939	Average price per cwt. at 1st Jan. 1939	Cost per unit of protein equivalent Feb.	Cost per unit of protein equivalent Jan.	Cost per unit of starch equivalent Feb.	Cost per unit of starch equivalent Jan.
Protein Foods			s. d.	s. d.	s. d.	s. d.	s. d.	s. d.
Linseed	18.75	119.2	16 1	16 5	17 2	17 6	2 8	2 9
Crushed linseed	18.75	119.2	17 2	17 3	18 4	18 5	2 10	2 11
Linseed cake (home-made)	24.6	74.0	12 5	12 7	10 1	10 3	3 4	3 5
Linseed cake (foreign)	27.05	74.5	11 7	11 6	8 7	8 6	3 1	3 1
Linseed cake meal	24.6	74.0	12 0	12 0	9 9	9 9	3 3	3 3
Decorticated Cotton cake	34.65	68.4	9 10	9 9	5 8	5 8	2 10	2 10
Decorticated Earthnut cake	41.3	73.0	8 11	9 3	4 4	4 6	2 5	2 6
Extracted Soya Bean meal	38.3	64.0	10 7	10 8	5 6	5 7	3 3	3 4
Fish meal (60% protein)	53.0	58.9	16 8	16 8	6 3	6 3	5 8	5 8
Meat meal (60% protein)	55.0	61.0	15 3	15 1	5 6	5 6	5 0	5 0
Meat & bone meal (40% protein)	36.0	44.0	9 11	10 1	5 6	5 7	4 6	4 7
Medium Protein Foods								
Palm kernel cake	16.95	73.2	8 7	8 7	10 2	10 2	2 4	2 4
Palm kernel meal	16.55	71.3	8 10	8 10	10 8	10 8	2 6	2 6
Starchy Foods								
Maize	7.65	77.6	7 7	7 8	19 9	20 1	1 11	2 0
Maize meal	7.65	77.6	7 8	7 11	20 0	20 8	2 0	2 0
Flaked maize	9.2	84.0	8 4	8 6	18 1	18 6	2 0	2 0
Wheat	9.6	71.6	6 10	6 8	14 3	13 11	1 11	1 10
Red bran	10.0	42.6	7 9	7 5	15 6	14 10	3 8	3 6
White bran	10.0	42.6	9 1	8 9	18 2	17 6	4 3	4 1
Brown pollard	10.85	56.5	7 9	7 6	14 3	13 10	2 9	2 8
White pollard	10.85	56.5	8 9	8 7	16 2	15 10	3 1	3 0
Barley meal	7.3	71.4	7 11	8 0	21 8	21 11	2 3	2 3
Oats	7.6	59.5	6 8	6 5	17 7	16 11	2 3	2 2
Crushed oats	7.6	59.5	7 4	7 1	19 3	18 8	2 5	2 5
Tapioca root flour	1.2	83.5	7 1	7 6	118 1	125 0	1 8	1 10
Non-Concentrates								
Potatoes	0.85	18.5	3 1½	3 9¾	73 6¼	89 8½	3 4½	4 1½
Turnips (Swede)	0.7	7.3	0 10½	0 10¼	25 0	24 5	2 4¾	2 4
Upland hay	4.9	29.0	3 1	3 0¼	12 7	12 4	2 1½	2 1
Meadow hay	4.7	37.0	2 3¼	2 0½	9 8	8 8	1 2¾	1 1¼
Oat Straw	0.5	21.0	2 1½	2 1¼	85 0	84 2	2 0¼	2 0

The object of the foregoing tables, besides providing information regarding the prices of feeding stuffs and the trend of prices, is to give purchasers a

guide as to the economic purchase of supplies. It should be understood that the price per ton is not a sound basis on which to judge whether or not a particular food or grade of a particular food is good value for money. The composition of the foods is the only basis on which different grades can be compared. The value of foods of different kinds, but of the same nature in reference to market prices, can also be compared on this basis.

In the case of an artificial manure which supplies only one fertilising ingredient as, for example, sulphate of ammonia, which supplies nitrogen, the cost of the unit of nitrogen at the price charged can be determined quite readily by dividing the price per ton by the percentage of nitrogen in the sample, and the figure thus obtained is the cost of a unit of nitrogen. By this method the most economical source of nitrogen can be ascertained. Similarly, in the cases of phosphatic and potassic manures.

With feeding stuffs, however, the same method cannot be applied to determine comparative values. This is because every feeding stuff contains three important food constituents in varying proportions. These are (1) carbohydrates, (2) oils or fats, and (3) proteins or albuminoids. The carbohydrates comprise a group of substances such as starch, sugar and cellulose. These substances supply heat or energy to the animal, and the surplus goes to form fat. They are the fuel which the animal requires to keep the body "fires" burning. The oils of a feeding stuff are also heat and energy suppliers, and the surplus is stored as fat. The oils are approximately 2½ times more valuable than the carbohydrates as heat and energy producers, but excess in a ration may lower its digestibility and cause digestive troubles. The proteins are the most valuable and most expensive food constituent. They contain nitrogen and are the part of the food from which products which contain protein are chiefly made. Thus the protein products, such as lean meat, milk and eggs, are formed principally from protein, and young, growing animals, dairy cows and laying hens must have an adequate quantity of protein for full growth, development and production.

While all animals require a certain amount of carbohydrates, oils and proteins, the relative amounts depend on the class of stock. For example, a two-year-old fattening bullock requires much less protein than a dairy cow in milk and a fattening chicken less than a laying pullet.

There are wide differences in the composition of the different kinds of feeding stuffs. Some are rich in carbohydrates and, therefore, particularly valuable for fattening purposes. These include oats, maize, barley and wheat, and their products. Others are rich in protein and are valuable for producing flesh, milk and eggs. These include decorticated cotton cake, decorticated earthnut cake, meat meal and soya bean meal.

In the following table the composition of some of the commonly used feeding stuffs is shown—

	Water.	Protein.	Oil.	Carbohydrates.
Non concentrates				
Swede turnips ...	88	1	0.2	9
Potatoes	75	2	0.1	21
Cabbage	89	1.5	0.5	8
Oat Straw	14	4	2	37
Meadow hay ...	10	10	3	45
Pasture grass ...	80	3.5	0.8	10
Fattening Foods				
Crushed oats ...	13	9	6	60
Maize meal ...	12	10	4	70
Barley meal ...	13	12	2	66
Pollard ...	13	15	5	57
Flesh forming foods				
Decorticated Cotton cake	9	40	9	26
Decorticated Earthnut cake	10	46	7	23
Meat meal ...	11	60	6	—
Soya bean meal ...	11	44	1.5	32

The problem confronting the purchaser of feeding stuffs, who is concerned with the business of getting best value for money, is one which is much more difficult to solve than is the case with artificial fertilisers. There are at least four aspects of the problem to be considered:

(1) The quality of the different foods offered for sale. This can be determined by reference to the particulars of composition which a seller must give a purchaser in accordance with the Fertilisers and Feeding Stuffs Act.

(2) The physical condition of the foods, and if fresh or stale.

(3) The suitability of the foods for the purpose in view.

(4) The comparative values of the foods at the prices quoted.

The chief concern of this section of the Report is comparative values and, therefore, that aspect of the problem will be considered specifically.

The proteins play a part in the nutrition of the animal which cannot be taken by either carbohydrates or oils. In addition to this, the proteins, carbohydrates and oils have very different values for the production of energy or fat. It therefore follows that the simple procedure of totalling the percentages of these three ingredients and dividing this total into the price per ton in order to obtain a value for a unit of the food-stuff is quite unsound. Various methods have been used to compare the values of different feeding stuffs, but none is completely satisfactory. For practical purposes the least cumbersome is the

method whereby the food-stuffs are placed in groups of similar composition, and the values of the members of each group are then compared by consideration of (a) their protein equivalents, and (b) their starch equivalents. The starch equivalent is the number of pounds of starch which would be required to produce the same amount of "fat" in an animal as 100 pounds of the food-stuff in question. It is essentially a measure of the fat-producing value of the food-stuff. The protein equivalent is the number of pounds of digestible true protein, plus half the number of pounds of non-protein nitrogenous substances such as amides, present in 100 pounds of the foodstuff. It is a measure of the value of the food-stuff to the animal as a source of protein.

By this method all foods can be reduced to comparable standards based on (1) the protein equivalent, and (2) the starch equivalent.

The next stage in comparing values is to determine the cost of a unit of protein equivalent and of starch equivalent in the different foods which are being compared, and to enable the reader to do this the protein and starch equivalent figures for the different foods are given in the table on page 636, and also the cost per unit of protein equivalent and of starch equivalent in each case. These costs have been determined by dividing the protein equivalent figure and the starch equivalent figure, respectively, into the current price per ton, and the lower the quotient figures thus obtained the cheaper is the particular food as a source of protein or of starch equivalent as the case may be.

However, it would be quite misleading to compare the cost of a unit of protein equivalent in a protein food (which is purchased principally for its protein) with the cost of a similar unit in a starchy food. In other words, foods such as maize meal and pollard cannot be compared on the basis of cost of protein equivalent with foods such as decorticated cotton cake and meat meal.

The best course to adopt is to consider for what purpose the particular food is required, decide what foods are suitable for that purpose, examine the samples of these different foods which are offered and, if all appear to be satisfactory, apply the unit value system of determining which one provides protein equivalent or starch equivalent at the cheapest rate. A few examples may be helpful in explaining the procedure.

(1) Suppose it is intended to purchase a protein food for the purpose of balancing a ration for dairy cows. The protein foods suitable for dairy cows are decorticated cotton cake, decorticated earthnut cake and soya bean meal. From the table on page 636 it is seen that at the current average prices of these foods the cost of the unit of protein equivalent in each is as follows:—

Decorticated cotton cake	...	...	5/8d.
Decorticated earthnut cake	...	...	4/4d.
Soya bean meal	...	...	5/6d.

Accordingly decorticated earthnut cake is the cheapest source of protein.

(2) A protein food is required as a milk substitute to balance the ration for fattening pigs. The foods suitable for this purpose are soya bean meal, meat meal and meat and bone meal. Referring again to the table, it is seen that at the current average prices of these foods the cost of the unit of protein equivalent in each is as follows:—

Soya bean meal	...	...	5/6d.
Meat meal (60% protein)	...	...	5/6d.
Meat and bone meal (40% protein)		...	5/6d.

This shows that at the respective prices per ton ruling at present, all three supply protein at the same cost. It should be noted, however, that in the case of meat meal and meat and bone meal, the former should be used in preference to the latter, since 1 cwt. of it in the meal mixture will provide as much protein as $1\frac{1}{2}$ cwt. of the latter. Besides, having usually a lower content of oil than the 40% protein grade, the 60% meat meal is likely to prove more satisfactory than the lower grade, both from the thriving point of view and as regards producing bacon of good quality. The use of the lower grade of meat and bone meal in mixtures for the feeding of pigs is not recommended.

(3) Whether is it more economical to feed white pollard than brown pollard or white bran than red bran, even though the prices per ton of the white grades are higher than those of the brown or red grades? The figures in the table show that the cost of both the unit of protein equivalent and of starch equivalent is less for the brown pollard than the white, and less for the red than the white bran. It follows, therefore, that at current prices the coloured grades of pollard and bran are cheaper than the white grades. It should be remembered in this connection, however, that the comparison of costs in these cases has been made on the assumption that the composition of the coloured grades is the same as that of the white grades. A pollard containing say, 8 per cent. fibre, even if of a white colour, would have a far lower feeding value than one containing only 4 per cent. of fibre. Colour is not a guide as to the feeding value of pollard or bran.

PRICES OF FERTILISERS AT SPECIFIED CENTRES.

The following table shows the retail cash prices per ton of fertilisers at 1st February, 1939, at representative centres in Northern Ireland.

	Antrim	Armagh	Ballymena	Belfast	Castlewellan	Coleraine	Dungannon	Enniskillen	Omagh	Strabane
	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.
Nitrogenous Manures :										
Nitrate of Soda (15.5% N.) ...	8 5 0	—	—	8 0 0	—	—	8 10 0	—	—	—
Sulphate of Ammonia (20.6% N.)	8 0 0	—	—	7 12 6	8 0 0	—	8 0 0	8 7 6	8 2 6	8 10 0
Nitro Chalk (15.5% N.) ...	8 5 0	—	—	7 10 6	—	—	8 10 0	8 10 0	8 10 0	8 12 6
Phosphatic Manures :										
Superphosphate (16% S.P.A.) ...	—	—	—	3 13 9	3 17 6	3 15 0	4 0 0	4 2 6	4 2 6	4 10 0
Semsol (5% S.P.A., 15½% P.A.)	3 10 0	3 7 6	3 5 0	2 17 6	3 5 0	3 5 0	3 10 0	3 10 0	3 10 0	3 10 0
*Basic Slag (16% to 17% P.A.) ...	—	—	—	2 18 0	—	—	—	—	—	—
*Basic Slag (18% to 20% P.A.) ...	—	—	—	3 6 0	—	—	—	—	—	—
Gafsa Rock Phosphate (26% P.A.)	3 5 0	3 0 0	3 2 6	2 10 0	2 15 0	3 0 0	3 5 0	3 5 0	3 6 3	3 5 0
Potash Manures :										
Kainit (14% P.)	3 12 6	—	—	3 2 6	—	—	3 15 0	3 15 0	3 12 6	3 10 0
Potash Salts (20% P.) ...	4 10 0	4 10 0	4 5 0	4 0 0	—	4 5 0	4 15 0	4 15 0	4 10 0	4 10 0
Potash Salts (30% P.) ...	5 15 0	—	5 10 0	5 5 0	—	—	6 0 0	6 0 0	5 15 0	5 17 6
Muriate of Potash (50% P.) ...	8 17 6	—	8 15 0	8 10 0	9 0 0	—	9 0 0	9 10 0	9 0 0	9 0 0
Agricultural Salt	2 10 0	2 0 0	2 10 0	3 10 0	—	—	3 0 0	2 0 0	—	3 0 0

Abbreviations : N—Nitrogen. S.P.A.—Soluble Phosphoric Acid. P.A.—Phosphoric Acid. P—Potash.

*If obtained under the Land Fertility Scheme, the price of British made basic slag will be 25 per cent. less than the figures quoted, since a subsidy equivalent to one-quarter is payable. The price for British basic slag, c.i.f. Belfast and Londonderry, is fixed by the Land Fertility Committee and is the same at both these ports. The retail prices at Belfast given above are based on these c.i.f. prices plus the charges approved by the Committee for unloading and distribution. The price at other centres will be the price at Belfast or Londonderry plus the carriage from the port to the particular centre.

The cost of the unit of fertilising ingredient is determined by dividing the price per ton by the percentage of the ingredient contained in the manure, and this method of determining values is the only sound basis on which two different manures or two grades of the same manure, supplying the same fertilising ingredient, can be compared. The price per ton is not a reliable guide as to which is the better value for money. For example, at the prices ruling at Belfast for the various manures, as shown on the table on page 641 the costs of the units of the fertilising ingredients are as follow:—

Nitrate of Soda (15.5% N.)	10/3¾	(Nitrogen)
Sulphate of Ammonia (20.6% N.)	7/4	,,
Nitro Chalk (15.5% N.)	9/8½	,,
Superphosphate (16% S.P.A.)	4/7½	(Phosphoric Acid)
Semsol (5% S.P.A., 15½% P.A.)	2/9¾	,,
Basic Slag (16% P.A.)	3/7½	,,
Basic Slag (19% P.A.)	3/5¾	,,
Gafsa Rock Phosphate (26% P.A.)	1/11	,,
Kainit (14% P.)	4/5½	(Potash)
Potash Salts (20% P.)	4/–	,,
Potash Salts (30% P.)	3/6	,,
Muriate of Potash (50% P.)	3/4¾	,,

It is seen that the price of 14% Kainit is £3 2s. 6d. per ton, and of 30% Potash Salts is £5 5s. 0d. per ton, and it might be concluded that the Kainit was the better value for money. This is not so. The 30% Potash Salts contains more than twice as much Potash as the Kainit, and is, therefore, a cheaper source of potash when the price is even double that at which Kainit is offered. The cost of a unit of potash in the 30% Potash Salts is seen to be only 3/6d., whereas the cost of a unit of potash in Kainit is 4/5½d. At the prices ruling for these manures, 30% Potash Salts is, therefore, better value for money than Kainit. Similarly, it is seen that at the prices prevailing at Belfast, Gafsa Rock Phosphate is the cheapest sourse of phosphoric acid and Sulphate of Ammonia is the cheapest source of Nitrogen.

In connection with the costs of the units of phosphoric acid, as shown in the table on the previous page, it should be noted that in the case of Superphosphate, the cost is that of a unit of soluble phosphoric acid: whereas in the cases of Basic Slag, Semsol, and Gafsa Rock Phosphate, the figures represent the cost of a unit of insoluble phosphoric acid. It would not, therefore, be correct to compare the unit price of the phosphoric acid in Superphosphate with those of the phosphoric acid in the other three. It should also be noted that the costs of the units of phosphoric acid in basic slag will be less than the figures shown above, if that manure is purchased under the terms of the Land Fertility Scheme.

TRADE AND PRICES OF LIVE STOCK AT BELFAST AUCTION MARTS.

Much heavier supplies of beef cattle were forward at the Belfast Saleyards last month than in December. The demand, generally, was fairly steady all month and prices were consistently higher than in December. The average quotation for the month was 2/2d. per cwt. firmer at 36/2d. per live cwt. The quality of the offerings was somewhat variable, but there were many very good animals included and some of these fetched as much as 40/- per live cwt. For the rougher cattle trade was slow but taking quality for quality, business was better than in December and values ruled higher. As a general rule price ranges throughout the month were as follows:—Top quality 37/- to 40/- per live cwt.; good commercial cattle 35/- to 37/6; and rougher, unfinished lots from 32/- to 35/- per live cwt.

The following table shows the average prices of fat cattle during the past six weeks compared with the corresponding dates a year ago.

Week ended	*per cwt.*	*Week ended*	*per cwt.*
7th January, 1939	35/8	8th January, 1938	41/9
14th ,, ,,	36/7	15th ,, ,,	40/10
21st ,, ,,	36/9	22nd ,, ,,	41/4
28th ,, ,,	36/–	29th ,, ,,	39/11
4th February, ,,	36/5	5th February ,,	40/3
Average for month	36/2	Average for month	41/–
11th February, 1939	36/6	12th February, 1938	40/10

Store cattle also increased in number, but in general, the turnouts were below normal, although sufficient for requirements. Quality was of a fairly good standard all month and a good trade was experienced at higher rates. Large forward stores in condition met the keenest enquiry and young sorts showing quality were also eagerly sought after. The following were the general price ranges throughout the month:—Large stores £13 to £15 10s.; six-quarter-olds £10 to £13; yearlings £8 to £11, and calves £6 to £9 per head.

Dairy cattle supplies were larger than in December and about the same as November. Good quality dairy stock was easily cleared, but for other sorts trade was sluggish and prices depreciated. Best quality cows at the beginning of the month topped £30 10s., and the general range for the month was from £22 to £28 15/- per head. Fresh, useful cows ranged in price from £17 to £22 and aged and rougher cows from £12 to £18 per head.

Sheep were also in heavier supply last month, and firmer in price. A large number of well-finished sheep and lambs were included in the offerings and these were readily cleared to shippers and local butchers at firmer rates. Price ranges are shown in the table on the next page.

PRICES OF OTHER STOCK AT THE BELFAST AUCTION MARTS.

Description		Week ended 7–1–39	Week ended 14–1–39	Week ended 21–1–39	Week ended 28–1–39	Week ended 4–2–39
Fat Cows	Range of 1st quality	£13 to £20-10	£14 to £19	£13 to £17-10	£12 to £18	£14 to £19-12-6
	,, 2nd ,,	£4-10 to £14	£9 to £14	£8 to £13-10	£5 to £14	£10 to £14
Store Cattle						
Large Forward Stores ...	Range of 1st quality	£13-10 to £17	£13 to £14-2-6	£13 to £15-10	£13 to £15-5	£13-10 to £15-5
	,, 2nd ,,	£10 to £13-5	£11-15 to £12-15	£11-10 to £12-15	£11-10 to £12-15	£12 to £13-5
Younger Stores ...	,, 1st ,,	£9 to £11-5	£8-10 to £10-15	£9-5 to £11	£9 to £11	£9-10 to £11-5
	,, 2nd ,,	£7-10 to £8-15	£7 to £8-5	£6 to £9	£7 to £8-10	£7 to £9
Dairy Cattle						
Milch Cows	Range of 1st quality	£22 to £30-10	£22 to £28	£22 to £28-15	£23 to £30	£22 to £28-10
	,, 2nd ,,	£18 to £21	£16 to £21	£17 to £21	£17 to £22	£17 to £21-10
Springers	,, 1st ,,	£19-10 to £22-10	£21 to £28	£19 to £21-10	£21 to £23	£20 to £22
	,, 2nd ,,	£16 to £19	£16 to £20	£15 to £18	£16 to £20	£16 to £19-10
Sheep and Lambs						
Crossbred & White Ewes	Range of 1st quality	27/– to 38/6	28/– to 39/–	32/– to 44/–	28/– to 43/–	35/– to 45/–
	,, 2nd ,,	25/– to 31/–	20/– to 34/–	25/– to 34/–	25/– to 34/–	25/– to 36/–
Blackface Ewes ...	,, 1st ,,	24/– to 32/–	26/– to 33/6	28/– to 38/–	26/– to 37/6	24/– to 38/–
	,, 2nd ,,	18/– to 23/–	20/– to 27/–	20/– to 27/6	20/– to 29/–	18/– to 27/6
Crossbred & White Lambs	,, 1st ,,	32/– to 54/–	40/– to 55/6	35/– to 55/–	35/– to 52/6	40/– to 55/–
	,, 2nd ,,	22/– to 39/–	24/– to 39/–	20/– to 39/–	24/– to 39/–	30/– to 45/–
Crossbred Hoggets ...	,, 1st ,,	——	35/– to 39/–	35/– to 40/–	35/– to 39/–	38/– to 44/–
	,, 2nd ,,	——	30/– to 34/–	28/– to 34/–	30/– to 34/–	34/– to 37/–
Blackface Lambs ...	,, 1st ,,	17/– to 27/–	18/– to 27/6	18/– to 25/–	18/– to 24/–	18/– to 26/–
	,, 2nd ,,	14/– to 18/–	14/– to 21/–	12/– to 17/–	12/6 to 19/–	14/– to 20/–
Blackface Wethers ...	,, 1st ,,	24/– to 30/–	——	28/– to 37/–	28/– to 31/–	24/– to 27/6
	,, 2nd ,,	20/– to 23/–	——	23/– to 27/6	23/– to 27/6	20/– to 23/–
Rams	,, 1st ,,	32/– to 48/–	32/– to 45/–	35/– to 43/–	36/– to 45/–	36/– to 44/–
	,, 2nd ,,	26/– to 39/–	25/– to 37/–	30/– to 37/–	30/– to 38/–	30/– to 37/–

PRICES OF LIVE STOCK.

Average prices of Live Stock at Fairs during the month of January, 1939.

Date	Fair	Calves (under 9 months)	Store Cattle	Fat Cattle (18 months and over)	Springers		Milch Cows	Fat Lambs (under 12 months old)	Young Pigs
					Cows	Heifers			
		Per head £ s.	Per cwt. Live weight	Per cwt. Live weight	Per head £ s.	Per head £ s.	Per head £ s.	Per head £ s.	Per head £ s.
3	Omagh ...	6 5	36/– to 40/–	36/–	16 10	15 5	16 0	*1 15	——
								†0 15	
4	Londonderry ...	—	32/– to 37/6	33/–	16 15	——	——	——	1 7
4	Rathfriland ...	6 12/9	34/– to 40/–	35/–	20 0	18 0	18 15	*1 6/9	——
5	Ballymoney ...	7 5	35/3 to 38/9	——	18 15	21 0	15 10	——	1 10
5	Strabane ...	—	36/– to 38/–	34/–	15 0	——	——	——	——
6	Moy ...	—	34/– to 40/–	35/–	15 10	15 10	14 15	——	——
9	Irvinestown ...	7 1	34/– to 38/–	32/–	15 10	15 0	——	——	1 7/6
10	Enniskillen ...	6 2	34/– to 37/–	33/–	15 0	13 0	14 0	——	1 7/6
11	Crossgar ...	—	36/– to 38/–	——	17 0	——	——	——	2 0
11	Kilrea ...	5 17/6	31/– to 36/–	35/–	16 0	15 0	15 0	——	1 7/6
13	Ballygawley ...	—	28/– to 38/6	34/–	——	——	17 0	——	1 15
16	Camlough ...	6 10	37/– to 42/–	35/6	18 10	17 10	14 10	*1 6	——
17	Claudy ...	—	32/– to 38/6	33/–	13 0	12 10	——	——	1 6
18	Lisnaskea ...	5 12/3	31/– to 36/6	34/–	16 0	16 0	14 10	——	1 13
19	Ballynahinch	—	37/– to 40/–	——	20 0	——	——	——	1 15
21	Moneymore ...	7 7/9	36/– to 42/6	35/–	17 0	16 0	17 0	*1 12	——
21	Portadown ...	5 16/9	35/– to 38/–	37/–	19 0	16 0	17 0	——	1 15
23	Fintona ...	6 16/3	37/6 to 40/–	35/6	17 0	15 10	15 0	*1 15	1 9
26	Antrim ...	—	37/– to 40/–	35/–	23 0	——	——	——	1 6/3
27	Ballymena ...	6 8	27/– to 42/6	——	23 0	20 0	20 0	——	1 13
27	Castlederg ...	5 15	35/– to 37/6	34/6	14 5	——	——	——	1 10
27	Killylea ...	—	29/6 to 38/–	35/–	15 10	——	13 10	*1 11	——

*Downs and Crossbred. †Mountain.

SHIPMENTS OF LIVE STOCK.

Statement showing the Shipments of Live Stock from Northern Ireland Ports during the months of January, 1939, December, 1938, and January, 1938.

PORTS OF :—	CATTLE						SHEEP				PIGS			
	Fat	Stores	Milch Cows	Springers	Calves	Total	Fat	Stores	Lambs	Total	Fat	Stores	Total	Horses
Belfast	7,307	6,231	1,210	26	—	14,774	4,372	—	—	4,372	3,110	—	3,110	85
Larne	7	1,247	—	—	—	1,254	161	—	—	161	1,018	—	1,018	15
Londonderry ...	508	4,338	47	34	229	5,156	310	—	—	310	827	—	827	3
Newry	44	24	—	—	—	68	—	—	—	—	—	—	—	—
Total, January, 1939 ...	7,866	11,840	1,257	60	229	21,252	4,843	—	—	4,843	4,955	—	4,955	103
Total, December, 1938	4,589	6,857	831	67	114	12,458	9,098	—	—	9,098	11,262	—	11,262	71
Total, January, 1938 ...	5,134	12,353	1,069	75	236	18,867	7,116	—	—	7,116	12,828	278	13,106	171

IMPORTS AND EXPORTS.

Table showing the Imports and Exports through Northern Ireland ports of certain Agricultural Products during the month ended 31st December, 1938, and the twelve months ended 31st December, 1938, with comparative figures for the corresponding periods in 1937. This information also includes trade with Eire across the land boundary.

(These figures are supplied through the courtesy of the Ministry of Commerce and are subject to revision).

COMMODITY	IMPORTS				EXPORTS			
	Month ended 31st December		Twelve Months ended 31st December		Month ended 31st December		Twelve Months ended 31st December	
	1938	1937	1938	1937	1938	1937	1938	1937
Bacon ... ... cwt.	4,627	3,491	51,202	41,349	53,438	40,807	429,897	397,250
Hams ... . cwt.	1,267	1,449	16,673	18,189	16,178	13,237	149,650	125,783
Pork ... ... cwt.	304	424	1,522	5,102	4,127	2,832	34,097	34,613
Butter ... ... cwt.	19,088	12,275	198,292	200,772	142	233	3,713	4,348
Eggs ... ... gt. hds.	26,504	16,796	930,638	829,629	144,939	127,062	3,442,539	3,405,050
Oat Products (inc. Oatmeal)cwt.	3,293	2,581	27,561	25,380	5,381	9,344	59,338	85,427
Potatoes ... ... tons	358	213	3,151	6,730	*13,595	*19,546	*170,287	*184,050
Poultry ... ... cwt.	2,060	1,950	4,736	4,794	26,547	22,425	187,970	196,721
Grass Seeds ... cwt.	3,817	3,745	27,750	12,764	43,035	41,200	332,203	315,470
Cream ... ... galls.	——	——	——	——	†36,057	†34,624	†308,069	†571,265

* These figures represent the quantities of potatoes inspected by the Ministry of Agriculture for shipment.

† These figures are compiled from the Monthly Trading Returns supplied by Creameries in Northern Ireland.

ACCOUNT OF TRADE AT FAIRS.

Supplies of store cattle at fair centres last month were small for the time of year, and while the quality of the offerings was up to the usual standards the general condition was less satisfactory, many animals being thin and backward following the rough weather conditions. Demand was good and even brisk in some districts for quality cattle showing condition, and higher rates governed most transactions. Generally speaking, good clearances were effected at prices that showed a distinct tendency to harden on the month. Strong animals were in best demand for finishing, and graziers were active for good types of smaller cattle.

Increased numbers of fat cattle of a fairly high standard of quality were shown in good condition, and a good volume of business was done. Demand at many centres was brisk, and prices were a trifle higher than in December. Well-finished medium weights of from 7½ to 9 cwts. fetched the top prices, but anything showing finish was easy to sell.

Dairy cattle were again in small supply. Trade continued similar to that in December; best sorts were in good demand at about late rates, but on the whole business was dull and inferior sorts were hard to cash. Fairly good clearances were, however, effected. Nice, useful springers were in best request for shipping purposes, but good qualities were very scarce.

Very small supplies of fat sheep and lambs of fairly good quality were shown and a fair local enquiry absorbed the bulk of supplies at about late rates. Yearling lambs in good condition were in best demand, and for this type prices tended to harden.

Young pigs were in rather lighter supply last month. Demand varied from slow to steady, and on balance the average price for the month was lower than in December. Store pigs were a small trade at cheaper rates. The small supply of brood sows of fair quality met a steady enquiry at unchanged prices. The general price range was from £5 10s. to £10 per head. Yorks and York crosses at from £7 to £9 per head were the best sellers.

Table showing the numbers of Live Stock (1) exposed for sale, and (2) sold at 21 fairs in Northern Ireland during the months of January, 1939, and December and January, 1938.

Description of Live Stock.	January, 1939.		December, 1938.		January, 1938.	
	Number exposed for sale.	Number sold.	Number exposed for sale.	Number sold.	Number exposed for sale.	Number sold.
Store Cattle ..	5,604	3,806	6,177	4,502	6,563	4,959
Fat Cattle ..	1,733	1,639	1,432	1,326	1,625	1,422
Dairy Cattle	1,008	703	1,173	893	1,038	875
Sheep	94	71	117	84	203	153
Lambs	340	235	332	221	198	114
Young Pigs ..	3,161	2,473	3,339	2,723	3,383	2,583

12th February, 1939.

MINISTRY OF AGRICULTURE.

List of Leaflets and other Publications

CATTLE.

Leaflet
No. 54 The Breeding and Rearing of Calves.
„ 5 The Dishorning of Calves.
Circular
No. 5 Why Pay a Tax on the Horns of Cattle?
Leaflet
No. 19 How to Feed Linseed.
„ 81 The Construction of Cow Houses.
„ 61 The Care and Management of Bulls.
„ 70 Ringworm.
„ 80 Hoose or Husk in Farm Stock.
„ 13 Contagious Abortion in Cattle.
„ 41 Blackleg, Blackquarter or Quarterill.
„ 64 The Destruction of Warble Fly Maggots in Cattle.
„ 82 White Scour in Calves.
Circular
No. 13 The Ox-Warble Fly.
Guide to the Live Stock Breeding Act (Northern Ireland), 1922.

DAIRYING.

Leaflet
No. 16 The Feeding of Dairy Cows.
„ 42 The Purchase of Balanced Rations for Dairy Cows.
„ 36 Advantages of Milk Recording.
„ 39 The Production of Clean Milk.
„ 78 Graded Milk.
„ 77 Licensing of Milk Producers and Distributors.
„ 51 Butter-making on the Farm.
„ 14 Cheese-making on the Farm.

POULTRY AND EGGS.

Leaflet
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„ 2 Improvement of Farm Poultry.
„ 3 Feeding for Egg Production.
„ 21 The Uses and Advantages of Portable Poultry Houses.
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„ 29 The Selection and Breeding of Laying Hens.
„ 83 The Care, Management and Feeding of Poultry Breeding Stock.
„ 46 Hints for Winter Egg Production.
„ 57 How to have Eggs of First Quality.
„ 56 Identification of Egg Supplies.
„ 27 How to Keep Eggs Clean.
Talk to Producers
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„ 52 Gapes in Chickens.
„ 43 Tuberculosis in Poultry.
„ 32 Roup of Poultry (Fowl Pox).
„ 31 Coccidiosis in Poultry.
„ 18 Marketing of Dead Poultry.
„ 37 The Raising and Fattening of Turkeys.
Report on Stormont Egg Laying Test.
List of Accredited Poultry Farms in Northern Ireland.

PIGS.

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„ 35 The Fattening of Pigs.
„ 69 The Construction of Piggeries.
„ 75 Pig Production and the Pigs Marketing Scheme.
Talk to Producers
No. 41 Feeding of Pigs in Relation to Bacon Quality.

SHEEP.

No. 47 The Care and Management of Sheep.
„ 63 Sheep—Castration, Docking, Foot-Rot and Care of Feet.
„ 23 The Handling and Care of Wool.
„ 24 Fluke in Sheep.

HORSES.

Leaflet
No. 25 The Rearing and Management of Young Horses.
Register of Premium Stallions.

CROPS, including Vegetables.

Lists of Growers of Certified Crops of Potatoes.
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No. 44 Results of Crop Experiments.
„ 7 Potato Trials.
„ 73 The Propagation and Maintenance of Healthy Stocks of Potatoes.
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„ 74 New Pure Strains of Flax.
„ 1 Flax Seed.
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No. 9 Smut in Oats.
Leaflet
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Leaflet
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„ 34 The Pruning of Apple Trees.
„ 9 The Renovation of Orchards.
„ 33 Spraying Calendar for Apple Orchards.
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„ 11 Fruit Tree Pests—Aphides and Apple Sucker.
„ 12 Fruit Tree Pests—Caterpillars.
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„ 65 The Packing of Apples in Barrels.
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Guide to the Marketing of Fruit Act.
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„ 71 The Cultivation of Raspberries.

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„ 72 Tree Planting for Shelter and Ornament.
„ 85 The Growing of Trees.

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„ 55 Destruction of Ragwort or Benweed.

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No. 60 Advantages of Winter Agricultural Classes.
„ 58 How the Fertilisers and Feeding Stuffs Act benefits the Farmer.
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No. 11 Fertilisers and Feeding Stuffs Act—General Summary.
„ 306 Fertilisers and Feeding Stuffs Act, 1926—Revision of Regulations.
„ 10 Purchase of Fertilisers and Feeding Stuffs.
„ 8 Basic Slag.
Leaflet
No. 84 Lime and Liming.
„ 66 Seed Testing Facilities for Traders.
„ 76 Acarine (Isle of Wight) Disease of Bees.
„ 26 Ordnance Survey Maps for Farmers.

Any of the above publications may be obtained free of charge and post free on application to the Secretary, Ministry of Agriculture, Stormont, Belfast.

The following publications can be obtained from His Majesty's Stationery Office, 80 Chichester Street Belfast, at the prices stated :—

(1) The Annual Report of the Ministry of Agriculture for Northern Ireland. Price, 2/6 net.
(2) Annual Report upon the Agricultural Statistics of Northern Ireland. Price, 2/- net.
(3) The Journal of the Ministry of Agriculture for Northern Ireland. Price, 2/6 net.
(4) The Agricultural Output of Northern Ireland, 1925. Price, 2/6 net.

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